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Blair

HUMAN PROGRESS

WHAT CAN MAN DO TO FURTHER IT?

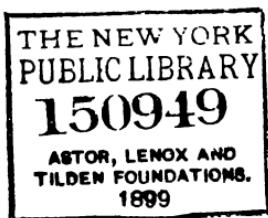
BY

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(HARVARD)

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PREFACE.

The reader will entirely miss the fundamental idea of this little treatise, and consequently judge it from a point of view necessarily involving a misapprehension and misconstruction as misleading to him as unjust to the work itself, if he regards it as intended to present a dogmatical exposition of a body of positive doctrine. On the contrary, not only, as explained elsewhere, is every statement—no matter how positive the form in which, in avoidance of the continued repetition of the qualifying explanation, it may be put forward—to be understood as hypothetical only, but the entire system, as a whole and in each of its several parts, is to be taken as nothing more than a connected series of suggestions, tentative and conjectural rather than assertive, so unsatisfactory to their author himself, in respect both of the manner of their presentation and of the persistent consciousness on his part of the probability of a lurking fallacy or the omission of a vital factor, that the end contemplated in their submission to the public judgment is chiefly that of suggesting certain points of view, either novel or heretofore neglected, the provisional adoption of which by investigators in the field of research to which they pertain may assist to introduce system where error and confusion of thought now manifestly mar the proper influence of the Pioneers

of Thought. The aim is, undeniably, ambitious, but the proceeding, it is hoped, not presumptuous. The humblest investigator may, without offence, offer his contribution, if he leaves altogether to others the appraisement of its value.

The purpose of the undertaking is the construction of a systematic body of prescripts of national policy directed to the furtherance of human progress. Now, the first requisite for such an enterprise is the creation of a Concrete Science of Progress; and the question of the accumulation of the data for this work leads up to the first of the concepts intended to be submitted as above-described; and this, in turn, introduces, as preliminary thereto, the subject of the details of the submission, as follows:

The request for critical examination is addressed to two different bodies of readers, according to the nature of the subject in hand. Upon questions relating to abstract principles, the resort is to the leaders of the thought of the period, the purveyors of knowledge helpful to progress. Upon problems of concrete action, the reference is to the business sense of the trained participants in, or systematic observers of, the current of events in every-day practical life.

Our first appeal, then, as above indicated, must be to the prosecutors of scientific or philosophic inquiry, the subject-matter of the concept referred to being a novel—or partially novel—theory of the nature and limitations of human knowledge, and the manner of the acquisition thereof. This theory, gradually unfolded and practically exemplified in the course of this Treatise, may be roughly outlined thus:

When man proposes to himself the question of his

Place in the Universe, he finds himself baffled by the circumstance that between him and the rest of the vast system with which he appears to be in touch, there is in fact a great gulf fixed:—that there is no such contact as he had so confidently assumed, and to which he does so ardently aspire. The nearest approach vouchsafed him to any direct and positive information respecting it consists in a succession of movements or phases of his own individual consciousness. By an absolute law of his nature, he is restricted to a single choice, namely, between (1) abandoning all thought upon the subject, and (2) accepting the assumption that these cognized phenomena are effects of which the cause must be found in a realm of things in the nature of objective realities. Thus circumstanced, he adopts the latter alternative. But the problem still remains, of obtaining any evidence whatever that this assumption is correct, and of attaining any positive knowledge as to the degree of the correspondence—should the existence of any such be established—between the reports which these impressions on the consciousness convey to the reasoning-faculty, and the objective realities thus reported on. The difficulty lies in the fact that we have no criterion, no diagnostic, whereby to test the question, other than such as we may frame for ourselves out of the materials which these changing phases of our consciousness supply. An untrustworthy witness testifying to his own trustworthiness:—such is the best, the only, evidence at our command !

The practical question for us, however, is not of why this is so, nor of how much better things might have been arranged, but of what is the most judicious course to be pursued under the circumstances:—of how

to make the best out of our meagre opportunities. The answer to this question constitutes the new concept of which we speak.

But before entering upon this matter it is expedient that we present for criticism another new concept, subordinate and auxiliary to the first, namely, one relating to the method according to which we should approach the inquiry proposed. This secondary concept takes form in the theory that, since our ultimate aims are wholly of a business nature, the department of human experience in which to look for guidance is that in which men have achieved success in the solution of business problems.* [The unfolding process of the pursuit of the main inquiry will presently afford the reader a more definite understanding of the terms here employed.]

From the business point of view, then, the first thing in order is to determine what is the nature and scope of the knowledge we are seeking; and then, having settled this point, to inquire how much of it can be gleaned from the fields that are open to our observation.

As regards the first of these questions, we encounter no difficulty. A reference to the purpose proclaimed at

* It will doubtless strike the great body of the prosecutors of *a priori* methods as a new concept indeed, that of leading to the seat of authority in a philosophical system, that plan of logical procedure which they have been accustomed to regard as no method at all, but simply a jumble of "the crude guesses of unmethodized experience," (Cairnes). But in view of the fact that the argument in justification of this course is intended to be supplied by the results of its employment which our researches are hereinafter to exhibit, it need not further concern us at present.

the outset supplies the information sought. We are looking for nothing beyond the knowledge which shall suffice to afford us systematic guidance in action having in view a certain definite end.

But here once more we are brought up against the necessity of introducing another new concept upon which we desire to ask judgment ; namely, a theory of human progress which inculcates the satisfaction of existing wants and the development of a knowledge of others of a higher character as the great co-ordinating prescript of practical action for the promotion of the march of improvement. By this means, the scope and nature of the knowledge we seek are—so far as relates to initial proceedings—narrowed down to such as will be serviceable to man in his efforts for the satisfaction of his wants. For a practical beginning, we simply aim to be equipped with sound Working Hypotheses, by which to shape our action to this end. Our business instinct at once suggests a resort to the stores of human experience in this particular, as the most obvious proceeding, under the circumstances.

Now no sooner do we turn the search-light in that direction than there stands revealed an amazing accumulation, a perfect treasure-house, of the information sought. We ask, “ What knowledge of things in their objective reality, serviceable toward the satisfaction of his wants, has man already acquired ? ” and Human Experience answers, “ From the lowest animal impulse to the highest aspiration, from the bodily craving for food to the soul-hunger for the spiritual communion, man’s invariable success, within certain limitations, in the satisfaction of a vast number and variety of needs, conclusively establishes the fact that

the assumption of a correct conception of *things as they are* which constitutes the basis of his action in these instances is so far trustworthy that these conceptions can be adopted as sound Working Hypotheses and acted upon as such, until a phenomenon of contrary import presents itself.

So far, therefore, as concerns the theme itself, to which we invite the attention of the philosophic inquirer, there can be no objection made because of a lack therein of either dignity or importance. If the view of the intimate relations between Science and Religion, between Knowledge and Belief, which is presented in the present treatise, should ultimately be established, there can be no more exalted subject, outside of the realm of the Spiritual, on which the human intellect can be employed, than the placing of epistemological philosophy upon a scientific basis by the creation of a Cosmic Philosophy which shall reveal the single purpose running through the entire body of the phenomena of man's terrestrial existence, past, present and future; the nature of the evolution of humanity which that purpose contemplates; the character of the requisites for such evolution; the limitation of human knowledge to that which is serviceable for the development and the satisfaction of those needs; and the apparently-limitless extent to which the accumulation of knowledge of this character can under scientific methods, be carried:—and it is to an inquiry having this result in view that this class of readers is invited.

As regards the suggestions upon which are solicited the trained insight of the men of action,*

*This description is intended to have a wide application.

it will become sufficiently evident that they are as worthy of the attention of those to whom they are especially referred, as those of the more abstract and speculative character are entitled to the notice of the philosophic and scientific reasoner. The inevitable consequence of the Theory of Human Progress above mentioned is the elevation of Economic Science to the position of the chief among the divisions of human knowledge on which to base our system. Now it will be found that a leading feature of the general hypothesis here to be presented is the proposition that the existing Economics is thoroughly unscientific and misleading: a proposition supported by an appeal to the facts of experience, interpreted according to business methods. Again, the general hypothesis itself, and the numerous subordinate details relating thereto, are wholly dependent on the verification which they receive from a comparison therewith of the actual current of affairs in the realm of the concrete. Thus, whether the logical process has to do with destructive or constructive work, there is a separate and clearly-defined function for each class of authorities respectively, namely, (1) the purveying, by the practical, business, class, of verified data, whence the speculative reasoners may construct anticipatory hypotheses, and (2) the verification by the same business-class of those hypotheses when thus constructed.

From the intelligent mechanic with a mind alert to things beyond the narrow details of his special calling, to the statesman directing the policy of a nation, each thoughtful businessman has it in his power to make valuable contributions toward the shaping of the public opinion of his day and generation, respecting the questions which are to be discussed here.

Again, not only is it the fact that the speculative theorist and the practical man of affairs can each find a place in this effort in pursuit of systematic knowledge, but, in virtue of the extreme simplicity of the system proposed, it is equally true that each can attain, respecting the truths pertaining to the department especially assigned to the other, a conception clear enough for all practical purposes. The common sense of the philosopher will respond to the conclusions of the business man, and the business man's capacity for abstract generalization will be adequate to the comprehension of the conclusions arrived at by the philosopher, however little versed he may be in the subtleties of the latter's dialectics.

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INTRODUCTION.

The reader familiar with the Positive Philosophy will not have progressed far in the body of this work without perceiving that its author has been largely influenced by that system. A line of inquiry which values all abstract reasoning no farther than as it purveys knowledge useful for the systematizing of practical effort, and which accepts as authoritative nothing but verified conclusions drawn from verified data, could scarcely be possible at the present day and not touch at many points some of the most characteristic features of the remarkable system of Auguste Comte. But while abundantly willing to acknowledge great obligations to that original thinker, the writer feels that, in the absence of any warning to the contrary, the natural result of these prominent suggestions of influence from that quarter, would be the formation of an impression of general adhesion to the Comtist philosophy as unfortunate for the little volume as it would, in fact, be unfounded. The present explanation is set forth for the purpose of arriving, at the start, at the effect which the perusal of the whole work must eventually produce, namely, that, so far as regards the treatment of the vital question of religion, this treatise will be found to be more distinguished by disagreement than by agreement with that system. It is believed that, with such precaution against misconception, the suggestions to be offered will be more likely to receive

an unbiassed hearing than could reasonably be expected in its absence.

This being the sole object of the present remarks, it will not be necessary to enter, at this place, into a detailed account of the various points of discordance between the Comtist system and that to which this essay is meant to be contributory, but merely to point out such as shall suffice for making the start on a proper understanding: leaving it to the evolution of the work to tell its own story as to the details of the hypothesis which it has to offer.

To begin with, a few words may be spared to express the writer's perfect accord with the condemnation which John Stuart Mill and others have expressed regarding Comte's incorrigible propensity to regulate individual conduct. The portions of the present work which deal with character-building will sufficiently indicate how completely at variance are the views it presents respecting the means of individual development, with the elaborate institutions of the *Politique Positive*.

There will be found a like agreement with those critics respecting Comte's aversion to the use of the word "cause". There surely can be no rational objection to the employment of the term when once it is clearly understood that no reference is intended to causes in the sense which Comte condemns, and with which we, in this essay, have no business nor concern, to wit., the Essential Reasons of Things; so that, by the expression "cause and effect" we mean no more than a constant relation of antecedent to consequent, and *vice versa*. When we reflect that, as Hume has pointed out, it is through the study of this relation that

we arrive at "all our conclusions concerning matter of fact and existence" that bear on human action in the realm of the concrete; so that "though the powers and forces by which the course of nature is governed be wholly unknown to us", yet are we able to arrive at the knowledge "necessary to the subsistence of our species and the regulation of our conduct in every circumstance and occurrence of life": — when we consider the vast significance to our entire researches, of this causal relation among phenomena, we can not doubt that the terms which enable the mind to grasp the significance of that relation with the surest hold are those to be employed, so long as we have duly guarded against their being taken for more than is intended.

A much more important discrepancy than either of these, however, will be found between the Comtist view of the place of the nation in the scheme of human progress, and that set forth in the following pages. The comparatively unimportant rôle which Comte assigns to this form of the social relation seems hard to explain; especially in view of the importance which he assigns to the family. To those who give to the nation the function as an instrumentality of progress which is accorded to it in this work, the Comtist treatment of the subject suggests — *pace Hamlet* — *The Tempest* with the part of Prospero eliminated.

But all of these differences sink into insignificance beside the fundamental disagreement on the profound question of religion, considered as the tie which binds*

*No reference is intended here to the etymological theory of the derivation of the word from *religare*: — a suggestion which appears to decline in probability in proportion to the closeness with which it is scrutinized.

the spiritual being of the human individual in reverent but intimate and loving companionship with another entirely spiritual individual Existence. Nothing in the realm of thought can present features of more complete contrariety than that which appears in this instance. For here the empiricism of Comte avails him nothing. His entire life's experience had afforded him no consciousness of the existence of such a bond. There could be no such bond for him, for there was, for him, no such Being. It was impossible for him, with his rare insight, to overlook the value of reverence as a factor in Character, but, from his point of view, this fact had no other result than to set him upon inventing a new object of worship, — manufacturing a religion to order.

On the other hand the crown of the edifice of the Empirical Philosophy, its glory and its pride, is found in the fact that through it, and through it alone, is made possible the justification on rigidly-scientific grounds, of the most elevated, most soul-satisfying, of the forms of religious faith. Inasmuch as the scope of the present work does not, in the body thereof, admit of any further allusion to this subject than the necessarily brief reference thereto introduced in connection with the theory of character*, it seems necessary, in view of its transcendant importance, to devote in this place the space requisite for a sufficient elucidation thereof.

* As will be seen later, the inquiries prosecuted in this essay are restricted to questions of the action of the State in furtherance of human progress. Further along, it will be developed that the State should not undertake to regulate religion. Hence a discussion of the subject, further than to the limited extent stated in the text, would be irrelevant.

It will be seen hereinafter that one of the fundamental data of the hypothesis which it is the object of this essay to expound, is the proposition that the practical work for man in the furtherance of his progress is the satisfaction of his wants. These are of three sorts, to wit., material, intellectual, and spiritual. It is with the latter alone that we are concerned at present.

We become cognizant of these spiritual wants through the Religious Sentiment. The religious sentiment, from the empirical point of view, is a psychic movement, of which the manifestations in the consciousness are (1) a sense of incompleteness in the Ego; of the need of a something from without, auxiliary to the personal qualities; and (2) a sense of satisfaction — in a higher or lower degree, according to circumstances — through the supplementing of the individual powers by means of communion with another Being than the Ego, possessing the qualities requisite for this function.

Inasmuch as our science expressly limits its scope to the realm of concrete reality, taking no cognizance of anything beyond actualities, — beyond matter and force and such psychic phenomena as are connected with these in the relation of cause to effect — we have no further concern with the religious sentiment than as a natural phenomenon, to be reasoned of as a quality of humanity, just as we should reason of the tensile strength of a bolt or the rigidity of a beam: our engineering undertaking being the construction of a serviceable system of supplying human wants. This must not be understood as implying any assertion or suggestion respecting the existence or the non-existence of a body of evidence of the reality of such communion, derivable from other sources; in other words, respecting any con-

siderations belonging to the realm of faith. Such discussion is expressly forbidden by our programme, which limits our field of research to the realm of knowledge; leaving the question of what there may be of evidence in a field of thought transcending human knowledge — being received into the consciousness directly, through the medium of the communion aforesaid, instead of being derived through the medium of the senses — to be brought into the discussion of problems other than the exclusively practical one which in the present treatise engages our attention. The question before us, then, is that of the knowledge we have concerning the religious sentiment : — concerning the objective reality—independently of our concept thereof — of the spiritual communion ; of the Being and the Bond.

In accordance with the Empirical method, as explained in the next succeeding division of this work, our first business is to range in order the related phenomena to an extent which shall suggest a generalization which embraces all of them in a single explanatory hypothesis. This done, we proceed to the verification of this hypothesis by a comparison with it of all the phenomena of our experience relating to the subject. Before entering upon this resort to the phenomena, however, it will be well to determine the degree of confidence which we can attach to the conclusions which our verification-process enables us to reach. Having accomplished this, we can proceed to apply the principles thus established, to the case in hand; we can inquire what, in the way of positive knowledge, the evidence of the phenomena available for our use in this instance can yield us.

We have already, in the few words descriptive of the religious sentiment (see page 7, *supra*), set forth the essential features of the phenomena of the individual consciousness which constitute the internal evidence of the existence of the Being and the Bond, independently of our own concepts relating thereto. The consciousness of the want, and the consciousness of the satisfaction thereof need no further elaboration of definition or description than that embodied in the brief statement there presented. Out of these simple but comprehensive phenomena, we frame our conjectural Hypothesis of the Religious Sentiment, as follows:

The Religious Sentiment is a reality; a veritable part of human experience, because based on the veritable existence of the Spiritual Communion between Man and a Spiritual Being. This experience is a growth, from a scarcely-discernible beginning, through a succession of much-interrupted and irregular stages of progressive development, until, in its highest forms, it exhibits a strength which causes the human party in the intercourse to count as but loss all the gratifications of life in comparison with the satisfaction of his spiritual wants, as secured through this communion. In its earliest manifestations, namely, among peoples of a low order of mental development, almost totally insensible to all sentiments of justice and mercy, it exhibits little beyond a simple emotion of fear in the presence of startling natural phenomena which the savage man explains to himself as the results of the action of invisible but more powerful man-like beings, whom, therefore, he tries to conciliate by the same methods that he employs for securing the good will of a dangerous neighbor. The religious sense, almost wholly latent, inert, unrecog-

nized, in his undeveloped soul, is roused to an extent that impels him to seek this intercourse, and thus is laid the foundation for the subsequent evolutionary process, step by step, according as the conditions change, up to that perfect flower of abounding and abiding Faith, of yearning for a closer and still closer communion with the delectable Soul-Companion, which, when once duly comprehended as a natural, logical expansion from green to ripened fruit, reveals the deeper significance of those outbreathings of the chastened and illuminated spirit of man—"The fear of the Lord is the beginning of wisdom" (spiritual knowledge) and "Perfect love casteth out fear."* Thus the terrestrial existence of man exhibits three distinct phases; to wit., (1) the physical, the material basis of the whole, to be secured first of all, because men must be fed and sheltered before they can be instructed; (2) the intellectual, because men must be intelligent before they can be spiritualized; and (3) the spiritual: the whole constituting that organized and mutually-interdependent ensemble which the phenomena of human experience indicate as the goal which the entire order and constitution of things terrestrial have appointed for the

*To those readers whose religious sentiment manifests itself chiefly in a feeling of awe, the idea of a companionship of the character implied in the treatment of the subject as here presented will seem inconsistent with the proper recognition of the infinite distance which must obtain between the insignificant creature and the inconceivably great and august Creator. But when we give due weight to the evidences of man's admittance to a share in the direction of the universe, we find no greater improbability, *a priori*, in the suggestion of the soul's admittance to communion with the Director of that universe.

fully-developed Humanity. Terrestrial existence without the satisfaction, to a certain extent, of the wants pertinent to the first of the phases, is impossible: without similar care for those belonging to the second phase, it is simply bestial; but in the case of the third, the spiritual phase, although for the individual its non-developement may be not incompatible with an existence of much usefulness to his fellow-men and a large measure of satisfaction in life for the individual himself, will his existence—as compared with what it might have been in the contrary case—be at best but mutilated and incomplete, and, from the point of view of the interests of the race at large, one unworthy the high position and consequent responsibility of the gifted individual; and unfortunate for human progress.

Having thus formulated our hypothesis of the religious sentiment, we next proceed, according to the programme already outlined, to inquire as to the canons of the Empirical Philosophy relating to the degree of certitude to which we can attain by the verification test to which we are about to submit the hypothesis just described.

We can perhaps gain a clearer understanding of the matter by the use of an illustration, as follows:—We begin with the case of our acquisition of the knowledge of our existence, mental and physical, taking up each of these in turn.

What warrant have we, then, according to the empirical system, for asserting respecting our actual existence as a psychic entity, independently of our own thinking on the subject, “We know”? We have the warrant of our experience in the concrete world, wherein we have, by means of our will—our own indi-

vidual, personal, ego-ic Will—so changed the order and constitution of things that, *e.g.*, whereas we otherwise should have languished for want of food, we willed to eat and did eat, and were refreshed. We ate because we had reaped, and we reaped because we had sown; and we sowed and reaped because we willed to do these things. No hypothesis other than that of our individual psychic existence will account for the physical phenomena in this case and the innumerable other analogous cases in our experience, invariably accordant therewith. It supplies us with a working hypothesis which meets all the requirements of the case and stands verified by the fact that our experience affords nothing to the contrary. So long as this remains true, so long do we have a positive precept relating to action for the supply of a want, namely: “Proceed on the assumption that you have an individual psychic existence.” Next, as to the evidence of our physical existence. Following step by step the above process of our reasoning and observation respecting the phenomena of our psychic existence, we find the same evidence available for that of our physical frame, and the same conclusion in the shape of the same working hypothesis, affording the same practical injunction, varied only so far as to the terms used that they shall apply to the physical, instead of the psychic, aspects of the case. We thus have at our command, *for all the uses of our concrete philosophy*, absolute knowledge of our existence, in body and in mind, as an ultimate fact for our reasoning, and this in the form of a definite, positive, precept, determining our action in real life. From this point of view the question of the evidence of the objective reality of our physical

environment is readily disposed of. We see at once that it is identical in character with that which establishes the fact of our own existence.

Having thus arrived at a clear understanding of the manner of the acquisition of our knowledge, there yet remains somewhat to be added respecting the nature of the knowledge thus acquired. Taking up this line of inquiry, therefore, we note a striking phenomenon of the process of obtaining the requisite information, namely, that it is operated through agencies and instrumentalities always and invariably psychic in their nature. Whatever may be the objects or movements or relations observed, all that the consciousness can learn respecting them is derived from the reports made to it through a sort of telegraph system, the message, in the form of an impression caused by movements of physical matter impinging on certain parts of the surface of the body sensitive thereto, being transmitted over nerve-wires to the receiving instrument—the “sensorium” of the metaphysical physiologists—where it is read off in terms of psychic concepts. Of this operation it is to be noted that there is no lack of opportunities of error, whether in the circumstance that the impression received from the object may be misleading, as in the case of the mirage, which shows a thing to be in a place where it is not; or that the message received may not have been sent from the world of concrete realities, as in the case of dreams and illusions; or in the interpretation of the message, as in the exaggeration of the importance of a fact of observation. We are thus made sensible of the necessity of the most careful scrutiny of the materials with which we, as empiricists, have to deal, both as regards the data of our

reasoning and the conclusions we derive therefrom. Furthermore, it now becomes manifest that there is no warrant for the common impression that our knowledge of physical, is more tangible, more substantial, than that of psychic, phenomena. This is a matter of so much importance to the entire empirical theory of the religious sentiment, that we must get to the bottom of it, if such a thing be possible. Observe then, once more, that all of the evidence that reaches the cognizing Ego is psychic in its nature—wholly, entirely, psychic; nothing else. Whether it relates to the material substance of our own bodies, or to any of the particulars of our physical environment, it is as psychic concepts, and in this, the psychic, form only, that our consciousness can be made conscious of them. It is not, then, in the character of the receiving instrument at the inner end of the nerve-telegraph line, nor in the language of the message, nor in the nature of the reporter at the outer end, that any difference is to be discovered. Is it, then, in the force of the impression received by the reporter? Are physical, more distinct than psychic, impressions? Evidently, they may or may not be, since it is observable of each of these that they may occur over a wide range as regards the degree of force with which they strike. The simple passing of a locomotive engine while we are engaged with other matters, may make but a slight impression on our consciousness and be so little cognized by us that it receives no registration in our memory; but if the machine runs over and crushes our foot, we receive an impression of its existence of a very vivid character. Similarly in the reign of the psychic, the tidings of the death of an individual known to us only as one whom society could

well spare, would produce but a trivial and transient impression compared with that caused by the announcement of the loss of our dearest friend. It is easy to explain the phenomenon of the existence of the impression that our knowledge of things psychic is less clear, distinct, and positive than of things physical. It is due to the exaggeration of the positiveness of the latter kind of knowledge, without applying the same treatment to the former—an exaggeration which is found to increase in inverse proportion to the degree of intelligence and habits of systematic thought of the reasoner. The less the attention is habitually directed to the realm of the psychic, the less clear will be the impressions derived from the phenomena of that realm. There is here a certain justification of the notion of the inferior substantiality of psychic, as compared with physical, impressions; but it is plain that it should afford no apology for that notion in those whose attention is, supposedly, as carefully directed upon the one description of phenomena as upon the other. It is manifest, therefore, that it is unphilosophical to regard our knowledge of the psychic world as being, *per se*, any less positive, real, and substantial, than our knowledge of the physical world; and that the fitness of our knowledge to supply us with a sound working hypothesis depends not at all upon the question whether that knowledge relates to physical or physic phenomena, but wholly upon the intrinsic weight of the evidence itself, in each case, no matter whether it relates to physical or to psychic phenomena, or to a complex of both.

We have now settled two of the canons of our method in the pursuit of that kind of knowledge which

we seek. These are (1) that the knowledge available for us in the formulation of a working hypothesis for our concrete science is limited thus: upon the one hand, we must accept no less a verification than that of the uniform testimony of experience respecting the fruits of action taken under analogous conditions; on the other, that we are incapable of acquiring any greater degree of certainty in our human description of knowledge than we thus obtain; and (2) that this proposition applies with equal force to problems physical and problems psychic. We are therefore bound to reject every proposition the evidence for which does not come up to this standard, and to accept every one which does.

Having established these principles respecting the criterion of positive knowledge for practical purposes, it is in order for us to take up afresh the main thread of our investigations, and, reverting to our conjectural hypothesis of the religious sentiment, proceed to its verification by a review of the phenomena of actual experience relative to the subject.

Let us first direct our attention to the phenomena of the individual consciousness, and this with a view exclusively to the verifying of our hypothesis of the religious sentiment in the case of the individual concerned. Let us, furthermore, call this case our own; describing it as that of one from whose personal experience the foregoing description of the phenomena of such a case was taken. A deliberate and systematic search of that experience discloses to us no exceptions to the characteristics of the phenomena as there described. Whenever the chamber of the soul is swept and garnished—swept clean of every base impulse,

every evil thought, and garnished with pure yearnings, lofty aspirations—and the heart sends forth its invitation to the Inspirer of these and all kindred emotions, the bidden Guest is there! A Gracious Presence diffuses an atmosphere of rest and consolation, a peace that passeth all understanding pervades the consciousness, and all the non-spiritual universe, physical and psychic, becomes by contrast mean and trivial. From such an intercourse the soul returns to the sordid world with a sense of having bathed in cleansing waters and drunk the strong wine of inspiration. In the mythologies of the races, among the primitive antetypes of deeper thoughts to come with the march of progress, there constantly recurs, under one guise or another, the tale of the supernatural visitor who leaves behind some tangible natural object in evidence of the actuality of the visit. It is easy to read in it a veiled suggestion of the evidences of the spiritual communion embodied in its results, made evident in the character—and consequent impression of his acts on the physical universe—of the individual possessed of that spiritual experience.

According to the canons of the empirical system as already laid down, we have in these simple phenomena, in their endless repetition without the occurrence of a single incompatible fact of experience, *the utmost certainty in knowledge attainable by the mind of man*. It rests upon precisely the same evidence that satisfies us of the fact of our own physical and psychic existence. To whatever extent we are justified in proclaiming of the latter, "I know," are we entitled to assert of the former, "I know." We are in search of nothing beyond a Working Hypothesis, and we are entitled to

act upon the hypothesis of the reality of the spiritual communion on precisely the same grounds that we are entitled to act on the hypothesis of our own existence and that of our environment. There is not a single subject of our cognizance, be it physical or psychic, that is attested to us by proof more authoritative than we have in this case. To question the sufficiency of the evidence for the substantial basis of the religious sentiment, is to abandon all attempts at systematic inquiry into the reasons of things, as a guide to action. If we are to pursue our investigations with any sort of order or system ; if we are to lay the foundation for an appeal to the reason of others ; we must recognize the sufficiency of this evidence to convert the hypothesis of the reality of the spiritual communion into an Ultimate Fact, an indisputable premiss, of our logical procedure.

In our exposition of this proposition as above, we have ventured upon an amount of reiteration which we recognize as wholly unwarrantable under ordinary circumstances. Our excuse is to be found in our conviction that we have here an absolutely vital point—a point which we must not leave behind us until we have brought our minds to an absolute and positive conclusion respecting it. It is not of the nature of a proposition to which we can give a provisional assent, letting it stand in that shape, awaiting a final settlement after the case has been fully presented. On the contrary, it must be determined once for all, here and now. The contention, then, is this : that we have, for the final and conclusive transmutation of the hypothesis of the reality of the spiritual communion into a positively-enjoined working hypothesis, all the weight of evidence

that the phenomena of the consciousness are competent to supply, or the mind of man to grasp, with reference to any subject whatever. Let the reader, before proceeding further, satisfy himself as to the adequacy of the considerations presented above in support of this contention.

We next take up the case of the External Evidences of the reality of the spiritual communion.

Before entering on this, however, it is to be remarked, by way of preliminary explanation, that this new line of inquiry is not prosecuted with a view to discover new evidence confirmatory of that first adduced in proof of the reality of the spiritual communion. That inquiry was made, it will be remembered, solely from the point of view of the individual seeking to discover in the phenomena of his own consciousness alone the proof demanded, and this exclusively in the interest of the inquirer himself. The results being conclusive, nothing more is called for in the way of satisfying the inquirer's own reason respecting the fact thus established. The knowledge acquired through that investigation, being positive, can not be affected by anything that may be discovered in the course of further inquiry. Corroboration is needless, and refutation impossible. It is for other reasons entirely that the work now before us is undertaken. There are two such. In the first place, the fact that a certain proposition is true, does not necessarily imply that it is the whole of the truth. Hence the empirical method requires that no phenomenon connected with the subject in hand shall be overlooked. It may even be found that there are phenomena which establish with equally incontestable force another truth ap-

parently irreconcilable with the first. This also, and the method of dealing with the resultant paradox, will be illustrated presently. The new line of inquiry, therefore, is to be prosecuted with a view to complete our knowledge of the subject in hand, from the point of view of the individual believer, as a necessary part of the investigation already begun. In the second place, all of this study of the subject from an individual point of view is simply subsidiary to the real inquiry, to wit, that which deals with the question of the reality of the substantial basis of the religious sentiment, as related to the progress of the race at large; hence the inquiry must include all the related phenomena as exhibited by humanity in general.

We now turn our attention, therefore, to these last namely, to the evidences to be derived from the experience of mankind, regarded by us from the position of an outside observer, and excluding, for the time, that testimony which lately constituted the all sufficing proof of the reality of the spiritual communion in our own case. At the same time, by virtue of the fact that we are ourselves a component part of the humanity which we study, the phenomena of our individual consciousness must be regarded as a legitimate part of the evidence in the broader case, and hence not to be overlooked in the treatment thereof. In order, therefore, to satisfy the requirements of this peculiar situation, our logical procedure must be as follows:

The question to be investigated is that of the veritable, actual, existence of a spiritual communion in the case of humanity at large, similar to that which we have found to exist in the case of ourselves. The first step in this inquiry must consist in causing to pass in mental

review before us, the pertinent phenomena accessible to us in the shape of the manifestations of spiritual experience among the race at large, regarded as a body separate from ourselves; and then to seek the generalization which shall include the whole of them, individual and general, in one hypothetical explanation. Having completed this work in the most satisfactory manner possible under the circumstances conditioning the case, we then bring forward the phenomena of our own spiritual experience, to see what light they may throw upon that generalization, and then form our ultimate conclusions accordingly.

Proceeding according to this method, we begin by casting a comprehensive glance over the entire field of human experience bearing upon the question in hand. We become aware at once that humanity everywhere, in all ages and in all places that come within our cognizance, exhibits manifestations of the force of the religious sentiment. The words Fetishism, Shamanism, Shintoism, Polytheism, Monotheism; Confucian, Brahminic, Buddhist, Zoroastrian, Olympian, Mohammedan, and the like, recall to us the universality of these manifestations. The monuments of Mongolian and Indian, of Babylonian and Assyrian, of Egyptian, and other ancient civilizations, attest how large a part was played by the religious sentiment in each and all of these vast political organizations. It would seem as though, if one wished by a single term to characterize the most conspicuous distinction between man and the reasoning lower animals, that of "the religious animal" would be the most appropriate. Or, reasoning in the same comprehensive manner, and seeking in the aspects of the physical, a simile for those of the spiritual, world, it

might be truly said that, even as when we see a flower springing from the soil, we feel justified in reasoning that it has a root beneath the surface, these innumerable, infinitely varied, manifestations imply a religious sentiment, deep-rooted in the human constitution. The essential identity of this sentiment in humanity at large with that which our consciousness reveals to us is made manifest when—as, for example, in times of deep affliction we encounter one of those eloquent phrases with which the old-time enthusiasts clothed their devotional transports—“The Lord is my shepherd,” “As the hart panteth after the water-brooks”—our souls bound within us in response, as the flame leaps up when the accordant vibrations of sound thrill it into sudden ecstasy. And again, the stories of martyrdom, of the victims marching triumphant to the stake, are not more effective in the witness they bear, than the distress of mind manifested by those martyrs to a thoroughly unscientific misapprehension, who tear out by the roots, and with these their heart-strings, the cherished faith of their lives, in mistaken devotion to what they suppose to be the truth.

Were there no other phenomena related to the case than the innumerable hosts of such as those just described, there would be no question of the identity of the spiritual experience of humanity at large with that of our own individual consciousness, and, by virtue of this identity, an equally-conclusive proof of the positive reality, for the race as for the individual, of the spiritual communion; but, on the contrary, there are others of an opposite bearing, which we are bound to take into account. Our next task, therefore, is to take up these negative phenomena in order, and to inquire to what

extent, if at all, they tend to diminish the force of the testimony just considered.

1. In the first place, there are those who, with Comte, would explain the phenomena cited above in support of our hypothesis, by a hypothesis of their own, as follows: — According to the laws of man's mental constitution, there obtains in him a constant propensity to reason from his own experience in seeking an explanation of such manifestations of force in nature as are not traceable to human intervention. Out of this natural propensity and the occurrence of startling phenomena, the concept of the intervention of superhuman beings and the homage paid to them are perfectly natural developments, not merely rendering unnecessary any resort to a hypothesis of supernatural influences, but even taxing human ingenuity to conceive any other result than that which occurs. Starting from such a purely natural basis, the subsequent evolution of the simple sentiment of terror into that of gratitude for favors attributed to the placated Unknown, and thence further into all the varied phases of reverence, affection, and the like, which distinguish the most exalted forms of supposed religious sentiment, is simply the entirely natural result (1) of the development in the human mind, according to the laws of its being, of higher and higher concepts of character — of the attributes characterizing an exalted nature; and (2) of the natural propensity in man to create God in his own image.

The difference between the two hypotheses may be epitomized thus:—The objector would explain the later by the earlier phenomena; our hypothesis explains the earlier by the later. According to the objector's rea-

soning, all the phenomena which we attribute to the existence of the Communing Spirit and its relations with the soul of man, are explicable by a reference to perfectly natural causes. According to us, our hypothesis explains as well as his the phenomena of the earliest manifestations of a disposition to seek intercourse with an unseen being, and explains the later manifestations in a much clearer and more convincing manner. But there is something beyond all this. His hypothesis fails to explain the phenomena of the inner consciousness so plainly indicated to be the experience — in a greater or lesser degree — of the great body of mankind. When it comes to the explanation of the consciousness of spiritual wants and the satisfaction of those wants by means of the spiritual communion, and of the universal experience that elevation of character follows the cultivation of that communion as surely, as inevitably, and invariably, as cleanliness follows on ablution,—when these facts of the experience come to be considered in the light thrown upon them by our individual spiritual experience, we perceive how much of bias against the theory of the religious sentiment must enter into the case in order that the negative should be preferred over our positive hypothesis. It becomes evident, in fact, that to attribute to the mental constitution of man the natural qualities which, by reason of their own innate potency, are adequate to carry him through the entire process of spiritual evolution without the existence of any spiritual realities, is but a repetition of the error which Comtism itself so clearly exposes, namely, that of assuming that a phenomenon has been accounted for when a name has been given to the undiscovered cause: positing "a prin-

ciple", a metaphysical abstraction, as a force that can operate on physical objects.

Before dismissing this subject, it seems proper that we should make direct reference to an adverse argument as follows :—

The evidence drawn from the sacrifices made for their religious faith by so numerous a body of believers, has been held by some — and rightly so — to prove the sincerity of their convictions rather than the accuracy of their knowledge. Indeed it would seem at first sight to be incontestible that mistaken confidence has not seldom proved to be as potent for the production of the most extreme sacrifices as the best founded assurance: that martyrs have borne as eloquent, as unequivocal, witness to error as can be found in the annals of martyrdom. But a more searching analysis of the facts will give them a different interpretation. Is it true, then, that that for which martyrs have endured the extreme of human suffering has ever been an essentially erroneous faith? Take the cases, on the one hand, of a Protestant tortured to death by Catholics, and, on the other, of a Catholic meeting the same fate at the hands of Protestants. On the surface it would seem that if either of these thus bore witness to the truth, the other must, by reason of the fact that his testimony is to the express contrary, have set the seal of his fearful sacrifice upon error. But we need not dig deeply to discover a much more systematic interpretation of the facts. What was there to nerve these martyrs — the one as much as the other — to such constancy? It may be answered that it was devotion to the cause of Protestantism, in the one case; in the other, devotion to the Church of Rome. But

what were these institutions to them but the mere intermediary agencies between the consciousness of the devotee and the Object of his reverence and love ; agencies which, through the influence of the principle of association of ideas, had come to be regarded as inseparable from that Object ? Take away the feeling engendered by this association, in either of these cases ; remove altogether the influences due to the experience of the spiritual communion, and what would there be left to send the victim exultant to the torture ? The witness of each was alike borne, not to the institutes which men had devised for making sensible to the grosser faculties the great tie between the soul of the man and the Intelligence higher than his, but to that truth which gave to each of these bodies of doctrine and forms of worship all of real significance that each bore to the mind of its adherent. Instead, therefore, of weakening the testimony of the phenomena of martyrdom, this objection seems to bring out in a stronger light the relation of cause and effect as between the veritable existence of the spiritual communion and the phenomenon of individual sacrifice in the cause of faith in that veritable existence. Every sacrifice made by the individual for his religion is a solemn asseveration on his part of his personal experience of the spiritual intercourse. There may be much of error mingled with the truth, as a little gem may lie imbedded in a mass of worthless mineral. The mind may be but dull, the feelings unrefined, and the religious concept confused, and coarse proportionately ; but it is logically inadmissible to attribute all of the sacrifice to a certain innate, uncaused, tendency, when the more obvious explanation of experience is available. His experience

that there is a something made tangible to him through the system for which he encounters danger, or hardship, or ridicule, or what not, which somehow meets a want —this is the explanation that satisfies the requirements of the case of the rudest sufferer for his religion's sake. He does not analyze his motives, but there is a species of unconscious cerebration through which he comes to feel that there is a something too precious for him to resign without a struggle; something that has a claim on him too just to be ignored without baseness.

It may still be objected that, whatever may be the significance of the phenomena of religious devotion, there are instances of the most heroic sacrifice in behalf of a cause in which no religious element is discernible: — instances, for example, of patriotic self-immolation. But what is this, other than to say that other sentiments — one other, at least — beside that of religious devotion, may inspire voluntary sacrifices as great? It does not belittle the strength of the latter sentiment: it simply goes to show the force, the grandeur, of the former. It serves to exalt patriotism into a high virtue, a great agency in character-building, and bears favorable testimony to the nobility of human nature as shown by its capacity to be so moved by feelings so honorable; but it imports nothing against the reality of the spiritual communion that certain phenomena analogous to those of the religious sentiment are traceable to a different, but in many respects analogous, cause. On the whole, then, it would seem that the Comtist evolutionist must readjust his position so as to give a better explanation than he now offers, of the phenomena of the religious sentiment, before he can invalidate our hypothesis of the spiritual realm as a veritable

constituent of the universe; as real as the intellectual and the material realms thereof.

2. In the second place, there are those who find a different reason for the rejection of the evidence in favor of the veritable existence of the spiritual communion, as follows:

The religious sentiment of the great bulk of the most enlightened nations of the present era, takes for its guide a certain body of recorded revelation, which it holds to be a direct communication from the Creator of the universe to the soul of each individual human being to whom this message shall come. The phenomenon which we have now to consider is this; namely, that—speaking in general terms—the greater the advance of the knowledge, other than religious, among this part of the human race, the more widespread and earnest has become the disposition to regard the religious sentiment with skepticism, because of the evidences of human imperfection believed to be discoverable in that communication. The question before us, then, is this: — To what extent, if at all, does this fact of the abandonment of the religious sentiment because of certain indications of fallibility in this formal revelation invalidate the empirical evidence for the reality of the spiritual communion?

To begin with, then, what is the nature of these skeptical objections? The first relates to the structure of the documents. It is contended that there are examples of repetition, of contradiction, of a tone and a method irreconcilable with the idea of a communication from a Being such as an intelligent and reverential faith pictures the asserted Author of these documents to be. The second has reference to instances of erron-

eous statement respecting facts, more especially those connected with the creation and government of the physical universe, which, it is contended, it would be simply irrational to attribute to its Creator and Governor. According to the third, the manifestations, whether direct or inferential, of cruelty, deceit, or injustice in the language put into the mouth of the Deity or embodied, with implied approval, in the narrative, are sufficient in themselves to discredit it. It is urged that the Christian must apply to his own religion the same standard which he insists upon in his missionary work among the adherents of other religious systems; that the attribution to the object of worship, of qualities or of actions which we should regard as immoral in a man, is conclusive in condemnation of the religion upholding such doctrine. In the fourth place, the supernatural features of the documents are dismissed with these arguments, namely, (1) that, in final analysis, we have nothing but human testimony to that class of phenomena, and, in view of human experience as to its untrustworthy character, the supposition of its errancy, conscious or unconscious, is much more probable in a case of this kind, which contradicts experience, than that of its truth; and (2) that no evidence which is as much at the service of error as of truth can be accepted as having any logical authority, and that this is the case in respect of all the supernatural features of the record in this instance; each of them, and sometimes down to surprisingly minute details, having done duty for other religious systems anterior to this one. Again, it is held that the idea of a Divine Communication is inconsistent with the facts attendant on the production, transmission and preservation of these documents.

They have been subjected to all the risks attendant on those of acknowledged human origin: others of analogous purport have been proposed and rejected:—sometimes by a close vote. There have been copies to be written and printed, and translations to be made; and the proof is conclusive that infallibility has not presided over these operations. This being so, what hinders that the same thing may be true of the several Councils which selected the writings constituting the recognized Hebrew and Christian Scriptures? Finally, it is asserted that a large part of what seems miraculous is precisely what, under the circumstances, was the thing to be expected:—miracles in a time of universal belief in them; traditions which were probably reasonably-accurate accounts, in their original form, of not unnatural happenings, but gradually developed by the natural tendency of perfervid propagandism into exaggerations which, under the favoring influences of the human propensity toward wonder-loving, carry the story into the region of the supernatural.

It will be seen, therefore, that the reasoning of the skeptic in this instance may be represented as follows:—“A divine revelation must be as free from imperfection as its Author; the Scriptures are not free from imperfection; therefore they are not of divine origin.” And again:—“The religious sentiment is founded on the assumption of the divine origin of the Scriptures: but the Scriptures are not divinely inspired; therefore the religious sentiment is founded on a fallacy.”

Let us place in contrast with this, the empirical theory of the Scriptures, as follows:

Accepting loyally whatever may be the teaching of the facts, the empirical inquirer constructs his hypo-

thesis of the place of the Written Revelation* in the Scheme of Human Progress, regarded as a natural phenomenon, as follows:

The chief instrumentality in human progress, after it has reached a certain stage in its development, is the satisfaction of the spiritual wants of the Ego. This satisfaction is obtained chiefly through the Spiritual Communion. "The Scriptures" contain a record of human experience relating to this communion. External evidence, in the shape of the results of the study of this record as witnessed in others, combines with our own internal experience to establish the fact that these scriptures constitute an agency for fitting men for that Communion. We therefore accept the belief in their divine inspiration as the best available working hypothesis in the case:—that is to say, as affording at once the only generalization capable of explaining all the related phenomena, and at the same time, and in consequence, as being the scientific basis of action. But these are not all of the phenomena connected with the subject. A systematic and unbiased analysis of the facts supplies conclusive proof of the presence of imperfections in these documents which cannot rationally be reconciled with the theory of their being the express language of the Being known to us through the Spiritual Communion. There is, therefore, but one hypothesis capable of explaining the numerous phenomena, unmistakably of this character, which we

* The only formal revelation referred to in the present discussion is the body of documents constituting the canonical books of the Old and New Testaments, regarded as an ensemble; the remarks made being intended as equally applicable to the whole or to any one or more of its parts.

encounter in such a search, to wit., that the transmission of the Divine Message has been entrusted to Human Agencies. In consequence, the line of reasoning, according to the empirical system, may be formulated thus:—"The proof of the existence of a divine, as also of a human, element in the Scriptures, is conclusive: therefore we must regard them as made up of two parts, of which one is Essential, the other Non-Essential.

Let us now bring these two hypotheses into contrast, in order that we may discover wherein lies the error which causes the discrepancy between them.

In the first place, we perceive that the sceptical reasoning is based on an assumption which has no warrant in the facts of experience. That the information vouchsafed by Deity to Humanity, in the shape of a verbal revelation, should be complete, is in direct opposition to all experience in respect of spiritual knowledge imparted from the same divine Source, in any other manner. Human knowledge, whether it relates to physical, intellectual, or spiritual, matters, is invariably incomplete. There is nothing—nothing whatever in all the experience of the race—to justify the skeptic's assumption; everything to discredit it. The skeptic, therefore, has no scientific standing until he revises his position by discarding his disestablished premiss and starts afresh. This done, where does he stand? His corrected datum, and the logical conclusion therefrom, now read thus: "A divine revelation, delivered in the form of a body of documents executed by human beings, may, according to all human experience, be expected to exhibit a kernel of spiritual nourishment enveloped in a husk of human origin; hence the fact that the Scriptures present indications of

such human—and, consequently, fallible—agency establishes, *per se*, no presumption against the divine origin of the message conveyed thereby.” Again, the assumption which constitutes the major premiss of the second of the skeptic’s syllogisms* is equally without warrant in fact, although having, superficially considered, a certain measure of justification. It is justifiable to the extent that it is in consonance with the belief—as we shall presently be called upon to note—of a large and earnest body of the most zealous of the partizans of the faith in the divine inspiration of the Scriptures; but, according to the empirical system, which accepts nothing that is not capable of verification, human certitude of the actual existence of the spiritual communion is founded upon experience entirely independent of the existence of the Scriptural Revelation. The skeptic, therefore, is bound either to invalidate this position or to accept it; and in the latter case, to amend his reasoning by discarding, as before, the erroneous premiss and beginning *de novo*. If we have overlooked nothing in our treatment of this point, there is no alternative for him; he must substitute for his original argument the following: “The proof of the existence of a substantial basis for the religious sentiment is independent of the question of the divine inspiration of the Scriptures; hence it is needless to discuss the latter question in connection with the discussion of the former.”

There is, of course, no intention to assert that the process of reasoning attributed as above to those who

* To wit (see p. 30, *supra*), that the religious sentiment is founded on the assumption of the divine origin of the scriptures.

deny the divine inspiration of the Scriptures—and the same remark is to be applied to the analogous instances to follow hereupon—is consciously and circumstantially carried out by them as described. What is meant is simply to formulate the successive steps of more or less unconscious cerebration which must be employed under the circumstances. If we have committed no error in this, there would seem to be no escape from the conclusion that our analysis leaves no rational warrant for the skeptic's position.

The above suggestions lead up to the question of his position respecting the evidence which the empirical philosophy finds adequate to establish a rational belief both in the reality of the foundation for the religious sentiment and in the divine element in the scriptural revelation. The empirical investigator regards as scientifically inexcusable the skeptic's ignoring of a certain body of significant phenomena, as follows: The great fundamental and decisive proof, in both these cases, lies in the spiritual experience of the individual, the Ego. *Ipsa facta*, this kind of evidence is at the command of those only who possess that experience. It may therefore be with justice maintained concerning those who refuse or neglect to take cognizance of any such evidence that, so long as they fail to make any effort to reach this point of view, they simply approve themselves investigators who do not investigate. What remains to be remarked on this subject will be submitted in connection with a different discussion.

In striking contrast with the phenomenon which has just engaged our attention, is one which must receive some notice before we close the subject of

scriptural inspiration. We have already made allusion to the great body of cultivators of the religious sentiment who refuse to accept the hypothesis of the presence of an element of human fallibility in those documents. The contrast is indeed striking. It would seem that the skeptic and the thorough-going believer had accepted the same assumption under the pressure of directly opposite influences. The skeptic, moved by a predilection for the orderly precision practicable in abstract speculation, and demanding the completeness and symmetry in his concepts which belong to metaphysical methods of inquiry, eagerly fastens upon the notion of a divine perfection in a divine communication, and, forgetting the necessity of verification in such cases, overlooks the difference between what his *a priori* conclusions picture to him and the facts of the concrete realm to which those conclusions are to be applied. The zealous believer, filled with the sense of the immeasurable preponderance of the spiritual over all but the most essential and imperative of the intellectual and material wants, regards the concession of the slightest suggestion against the perfection of the divine communication as an impiety; and, with a fervor and assured conviction more uncompromising, if possible, than that of the most pronounced skeptic, adopts the same premiss, to wit, "A divine revelation must be as free from imperfections as its Author." Then, satisfied by the evidence of the phenomena of his own personal experience—"the witness in the heart"—of the veritable existence of the Being and the Bond, and recognizing the voice of the former speaking in the scriptural message, he finds his minor premiss in the proposition,

"The scriptures are a communication from the Being to Humanity." From these he derives the conclusion, "Hence the scriptures contain no element of human imperfection." Let us now, as in the former case, make comparison of this with the empirical line of reasoning.

We of course encounter at the outset the same contrariety as before in the fundamental assumption, and, proceeding as then to reconstruct the latter, we arrive necessarily at the same conclusion, namely, that the presence of the human element in the formulation of the communication establishes no presumption against the divine origin of the matter of that communication.

The consequences of this change in the believer's point of view are sudden and far-reaching. In a moment, in the twinkling of an eye, as it were, the drop of bitterness that so cruelly mingled with every draught from the refreshing waters of faith is removed, and exorcised is the foul and fell spectre of doubt, that threw his black shadow across the ways of pleasantness which the soul traversed in spiritual abstraction from wordly cares and perplexities. Where before, the thought of the rejection of the written word — with all that such rejection implies — on the part of some of the most enlightened and most sincere of the seekers after truth, disturbed each fresh recurrence of the peace-bringing suggestions of the spiritual consciousness, all is now confidence and repose. There is an end, once for all, of that ever-present awareness of a secret chamber into which it was not wise nor wholesome to look: a knowledge relating to the deepest things of human existence, which it was not safe for

us to pursue. The struggle is over between, on the one hand, the consciousness that the aspiration for knowledge is one of the highest of human characteristics, and, on the other, the unacknowledged but haunting conviction that as knowledge becomes more systematic and wide-spread, faith in the divine inspiration of the scriptures is proportionately endangered. No longer is the believer disquieted with the thought that religion can not afford to persist indefinitely in the practice of the past in taking up a position against science only to retreat therefrom to another which must in turn be abandoned: can not afford to add many more to the list of lost fields — Astronomy, Geology, Evolution: — that we lean upon an ever-weakening reed, so long as our dependence is upon the willingness of the young, the ardent, the resolute in the pursuit of truth, to remain steadfast in their faith in a body of documents the express champions of which practically concede their unfitness to endure the test of systematic criticism unbiassed by unscientific predilections, as they do when they do their best to prevent such a test conducted by friends, though they are powerless to interfere with its application by avowed enemies. No longer need he stand appalled at the prospect of a sudden and general intellectual revolt of these custodians of the future of faith, demanding that their own scriptures shall receive the same scientific treatment as they are taught to apply to those of other religions. Who is there that would make his loyalty to truth the correlate to his religious sentiment, but must find in the empirical hypothesis of the dual constitution of the scriptures, the joy that cometh in the morning after a night of heaviness: must realize that now, at last, he can, with

Ecclesiastes, unite "knowledge" with "joy": must give thanks that no lurking fiend besets his way when he unreservedly sets himself to prove all things, that he may be able to discover and to hold fast that which is good.

With vision thus clarified, and the consequent removal of the bias that has distorted his reasoning hitherto, the believer will be in a position to see that the recognition of the human element in the revelation is essential to the safety of the belief in the divine element therein: that, in point of fact, we have simply the alternative, in view of the irresistible onward march of the scientific spirit, to concede this much or abandon everything. The evidence for the divine element, all sufficing as it is in its proper application, namely, to the matter only, of the message, becomes discredited when the attempt is made to make it applicable to the manner of conveying the message — to which, manifestly, it has no application whatever. If the whole is to be regarded as homogeneous in respect of the equal authenticity and authority of all its parts, the proof of error in any one of these invalidates all the rest. The hypothesis of the fallible medium relieves the divine element of responsibility for the accuracy of the human part; a responsibility for which — as any really systematic investigation must establish — it can not assume without deplorable consequences. On the contrary, through the hypothesis of the dual constitution, there is established, at once and forever, the long-sought, mutually adjvant, alliance and co-operation of knowledge with faith.

It is, of course, very difficult indeed to free the mind from the prepossessions of a lifetime, especially when

aided by certain metaphysical arguments in confirmation thereof. The idea of a communication of this kind suggests an edict from a sovereign to his subjects, seeking to impress upon the recipients the will of the ruler in language so clear and precise as to make complete their responsibility for precise obedience. The relation thus established between the Creator and such of his creatures as this communication is to reach, should, one would suppose, mark both the documents themselves as something apart from all other utterances, and those to whom they come as a people distinguished from all the other sons of men. The least important passage incontestibly belonging to that communication must be indescribably more spiritual and more weighty for the spiritual development of man, than the loftiest range of thought to be found outside thereof. But these *a priori* conclusions count for nothing in the empirical system as against the unmistakable facts. The latter hold up to us human experience, to remind us how seldom it is that the way we would plan things proves to be the way things are planned; that of all the writings constituting the later Scriptures, no part whatever is the work of Him who came expressly to deliver that message. That which He had left written on the hearts of His disciples sufficed for the time. Nor must we overlook the fact that if we are to uphold the position that every part of the communication is of equal value with every other, and that those who have received this are alone possessed of the Oracles of God, we must give to Paul's request to Timothy that he bring with him the cloak left at Troas, a place above the most inspiring utterance of the spiritual-minded

Guatama, the most elevating thought in the noble and ennobling morality of the pious Marcus Aurelius. It becomes plain, furthermore, that, even as it is unfair to the religious sentiment to imperil its existence in any mind by associating it with notions of the constitution of the scriptural revelation which, according to past experience, are likely to meet the fate of the many successively-invalidated doctrines relating to purely non-spiritual matters, asserted as confidently as these, but now disavowed;—that, even as this course is indefensible as applied to the religious sentiment, so is it unjust toward Science to repel from its pursuit the religiously-inclined, and to cast a stigma upon it as an unwholesome employment for the spiritual-minded. Thus it must be borne in upon the most conservative in their adhesion to the doctrine of the plenary inspiration of the Scriptures, that before committing themselves to a continued support of principles so fraught with danger to the religious sentiment and to the cause of human progress, they are bound to spare no pains to reach a right understanding of the points of difference between themselves, on the one hand, and, upon the other, those who refer all the phenomena suggestive of fallibility in the record to the human element therein. Let the reader but try this, with system and candor, and he will be surprised at the comparative insignificance of the part he is compelled to reject.

And now a new vista opens to the believer's spiritual vision. He perceives the necessity imposed upon him, as his own instructor and his weaker brother's keeper, of discriminating between the divine and the human elements in the message; between the essential and the non-essential. But here a formidable difficulty confronts

him. The one great fundamental purpose of our inquiry is the discovery of the principles of concrete action for the fitting of the Ego for the Spiritual Communion. The essential things, therefore, to be sought in the analysis of the inspired record, are those which make for this development of the most enlightened and most elevated form of the religious sentiment possible under the conditions created by the individual character and environment of each several Ego. But observe the endless variety of these conditions. That which is essential in one case, may be the reverse in another. The natural law of the association of ideas, potent with all, but especially so with that vast majority who seldom get farther with their thinking than thinking that they think, may render certain features of the record wholly human in their origin, very precious to those whose prevailingly-material methods of cognizing spiritual things render it impossible to make the religious sentiment sufficiently tangible to them without those features; whereas these may be a clog and a hindrance to a more spiritualized intelligence. Yet notwithstanding the endless diversities of spiritual character among individuals, the problem of formulating a single general precept of action in respect of drawing the line between essentials and non-essentials in each individual case, is rendered extremely simple by the simplicity of the ultimate purpose in view, as just defined above, to wit, the fitting of the Ego, in each instance, for the Communion. The conception relating to any part of doctrine, of observance, etc., that carries each Ego nearest to this adaptation, constitutes the best possible working hypothesis *for it*. To that soul, under the existing conditions, that con-

ception—erroneous perhaps, *per se*—may, in a certain practical sense, be said to be truer than the truth. It bears the believer nearer to the goal sought than would a conception more accurately representing the ensemble of all the related facts. The work of spiritual education, therefore, in cases of this character, is not to be begun by an attack upon these essential non-essentials. It should set out in a different direction. Effort should be directed toward the individual's general intelligence and ratiocinative power in other departments of human thought, with the purpose of so modifying the point of view of the too materially-minded believer as shall enable him gradually and insensibly to modify spontaneously his own conceptions concerning the essential and the non-essential in the divine message. Such a course will be consistently empirical in all its aspects. The system which makes Experience its Law-giver, must, *ipso facto*, be nothing if not conservative.

The considerations thus brought forward throw a strong light upon a point which will assume some importance at a later stage in this inquiry, when we come to deal directly with the concrete science of human progress. It will be found that, according to the programme of national policy developed empirically, the question of Education assumes a degree of importance hitherto utterly unrecognized in statesmanship; and, necessarily, in proportion to the weight assigned to the subject in general, will the question of Religious Education acquire a higher significance. The explanation of the relegation of this branch of instruction to private—whether personal or associated—effort, as there pronounced, is readily discoverable in

the fact discussed above, of the innumerable varieties in the spiritual wants of individuals.

If we have succeeded in making clear the empirical hypothesis respecting the place of the Scriptures in the development of the religious sentiment, but few words will be needed for the extension of that theory to the cases, not only of scriptural revelation in general, but of all traditions, observances, ordinances—all institutions and instrumentalities of every sort and description—whose *raison d'être* is their relation to the Religious Sentiment. In each and all of these instances arises the same question—to wit, the discrimination of the essential from the non-essential; and in each the problem may be represented by the same illustration drawn from physical life. The institution inquired of may be typified by a fluid chemical compound from which is to be precipitated one of its two constituents, leaving the other free; and the query is to find the reagent which shall produce the separation. The sought-for reagent must be equally efficient, whatever may be the spiritual point of view of the Ego in the case. The solution has already been sufficiently indicated. To each distinguishing feature of the institution in question the touchstone is to be applied in the shape of the question, "Does this make for the fitting of the Ego—the Ego now and here concerned—for the spiritual communion?" It will be surprising to find, on systematic trial, how satisfactory this method of dealing with materials so complex proves to be.

Casting a retrospective glance over the whole discussion, there would appear to be nothing in the grounds on which the skeptic justifies his rejection of

the divine element in the scriptural revelation, to disturb the believer's faith therein.

3. We now come upon a phenomenon which presents difficulties of a different character. We have considered the case of the inquirer who finds in the religious sentiment, even in its highest, most elevated, form, nothing beyond a natural development of the savage's anthropomorphic explanation of the manifestations of nature. We have investigated the position of the skeptic who, having set up for himself a certain concept of what a written revelation should be, thinks he discovers in the evidences of human fallibility in that revelation sufficient reason for regarding the religious sentiment itself as an illusion. Our analysis of the phenomena relating to both of these cases, conducted according to empirical methods, would seem to leave nothing to disturb our faith in the soundness of our hypothesis of that sentiment as expounded at the start. In the present instance, the phenomenon to be explained is that of the existence of a school of philosophers whom we must recognize as among the ablest and most systematic of investigators, which relegates the religious sentiment and all that relates thereto to a limbo of things beyond human knowledge. We are now, therefore, to set forth the hypothesis by which this phenomenon is accounted for on grounds which leave unimpaired the empirical theory of the religious sentiment.

Search where we may through the records of the past inscribed on the stony leaves of the book which geologic science has learned to interpret, or among the countless phenomena of animated nature, recent or present, we nowhere find evidences of intelligent pur-

pose more striking, more convincing, than the contrivances and instruments for the execution of the most revolting crimes of rapacity and cruelty. The evidences are numberless that the great scheme of conscious existence upon the planet embodies the plan that carnivorous Cain shall constantly require for his very existence the murder of gentle Abel, subsisting harmlessly on the insensible vegetal products of the soil—a plan to be carried out with gleeful zest of carnage on the part of the cruel slayer, with terror and anguish and torture as the portion of the innocent, unoffending, slain. Even in those cases in which the suffering would seem to come in the form of discipline—of evil inflicted that good may come of it—the humane and just view would seem to be that this does not explain the injustice of purposely and gratuitously creating the need of the discipline. That the actuality of these dread phenomena is beyond question from the empiric point of view will be manifest on recalling what has been set forth above concerning its laws of evidence. The canons of that system, in respect of the positive nature of human knowledge, are as rigid as barriers of tempered steel. For the purposes of action, the Working Hypothesis formulated and verified according to the methods of that system, must be regarded as absolutely, positively, established, so long as no irreconcilable phenomenon enters protest. Until then, *we know* that things are as we have interpreted them. Now, in the present case, the evidence is of precisely the same character as that of our own existence. If the one is real, so is the other. The experience of our race at large, and of ourselves, is conclusive on this question. But consider for a moment what this truth,

taken by itself, involves. We find ourselves to be, for all the eons of an endless existence, the hapless, helpless, hopeless, sport of an utterly irresponsible and frightfully-malignant Omnipotence. The thought, actually taken to heart and realized, is beyond the power of human reason to endure. Imagine the waking in the peaceful watches of the night from quiet slumbers to the sense of this fearful situation for ourselves and for those we love and cherish ! Imagine the tide of terror and despair that would overwhelm the consciousness—the blood-freezing horror and anguish ! Or fancy that, for once, the haunting disquiet has been lulled by the soothing influences of nature. We sit on a promontory of the New England coast on a summer day, the wooded shores, the lovely inland landscape, the placid sea, all smiling in the sunlight. Suddenly, a huge swordfish leaps out of the stilled waters, as with a mighty bound, for very joyousness. “Even the cold-blooded creatures of the deep,” we exclaim, “feel the inspiring influences of such a day.” “Alas ! no,” replies one at our side, better informed; “that leap is but a despairing fling of the agonized animal, into whose body a vile and scarcely-conscious slug is, day by day, month after month, slowly drilling to his vitals.” What a pall of darkness would fall upon the radiant scene—what a shock of reminder that it did but veil the dread realities behind it, would paralyze the shrinking soul ! That way lies madness.

In the course of our later researches into the phenomena of human progress in the satisfaction of the physical wants, it will be found that the speed of that movement has been accelerated in a remarkable manner during the last century: the increase in its rapidity

being cumulative. The same thing is observable, although in a less conspicuous degree, in the growth in sensibility to physical suffering in our own persons and in sympathy with the ills of all kinds suffered by others. The consequence has been a keen sense of the significance of the phenomenon of the Existence of Evil, with all that the term involves.

Another recent development, also cumulative in movement, has been exhibited in the progress of knowledge respecting the physical universe. With this rapid increase has come clearer and more precise concepts concerning the certainty of the existence of evil and the scope of its influence, both in breadth and depth.

Here, then, we have three distinct but concurrent forces, operating jointly to produce in the student of nature a bias to whose influence he would be something else than human if he did not, in some degree, succumb. The occasion for the exhibition of the effects of this bias was supplied at the same time that it was being developed. The most notable feature in the century's progress in knowledge of the physical universe (out of which came the progress in the capacity of satisfying human physical wants above referred to) is the development of the Evolutionary Philosophy. Through the prosecution of this memorable new departure, there has gradually been developed in the minds of men the conception of a Self-Sufficing Cosmos, every feature of which has been evolved by a self-regulating, spontaneously-acting process, out of materials and forces present therein in all past time; each successive step flowing out of the last preceding, as naturally as the growth of a plant, cell by cell, from the seed to the completed vegetal structure.

Observe now the natural consequence of this conjuncture of influences. On the one hand, the terrors of the enforced recognition of the Existence of Evil; on the other, the suggestion of a mental attitude which robs this grisly shape of its substantiality and reduces it to a shadowy possibility which ought, one would suppose, to be easily put out of sight. To the earnest seeker after the right theory of the universe, convinced that the acceptance of the theory of a creating and directing Intelligence involves the implication of the thraldom of humanity, for all time, to a pitiless fiend, the suggestion of a self-evolving Cosmos would be like the coming of an angel with healing in his wings. Under the stress of his inevitable bias, the Comtist view of the natural origin and evolutionary development of the religious sentiment, and the skeptical argument from the indications of human fallibility in the scriptural revelation, possess, for him, a weight which lends substantial reinforcement to the conclusions drawn from the self-sufficingness of the Cosmos. In the realm of ethical inquiry, under the bias described, he finds in the morality evolved out of civilization, what he deems to be all the satisfaction of the spiritual wants possible to man when his dreams of the reality of the spiritual communion have been dissipated. For guidance in action, he is thus brought to regard as sufficient, the cultivation of the ethical nature, according to the suggestions of which there is no assignable limit to the extent to which human intelligence, guided by sound principles of investigation, and organized in a common effort, may modify the conditions of existence, as well as elevate the character of man himself. Add to these the satisfying influences of a life crowded close

with intellectual labors, the constantly-increasing applause of many among the most intelligent:—combine all these considerations in one harmonious ensemble, and the phenomenon of the existence of the Scientific Agnostic, insensible, apparently, to spiritual wants in the consciousness of a life of high usefulness and of a conscience void of offence, seems amply accounted for. In fact, according to the principles of the empirical system, his position is entirely justifiable from his point of view. Assuming the correctness of his premisses, it supplies the best working hypothesis for guidance in action. The human reason being incapable of enduring the strain of the terrors involved in the theory of intelligent purpose in the government of the universe, the resort to the denial of the capacity of the human mind to deal with the problem of a spiritual superintendence thereof, and the assertion of the needlessness of any such hypothesis to account for the phenomena of nature, afford the best possible means of deliverance. But that the agnostic's point of view is utterly unscientific, we hope to make clear by what is now to be submitted.

Dropping, for the time, the discussion of the agnostic's position, let us turn to the consideration of the subject from our own point of view, according to the methods of the empirical philosophy.

The problem for us is the reconciliation of two discordant verities. On the one hand, we must, as already pointed out, in obedience to the requirements of the empirical system, accept as a conclusively-established datum, the existence of an Intelligence, between whom and the soul of man there is, under certain conditions, an intercourse established, wherein is to be

found the source of the most elevating thoughts, the noblest aspirations. The hypothesis which thus explains certain phenomena of our individual experience is verified by our experience of the results of our action taken in accordance therewith. As empiricists, therefore, the proof is absolute, the knowledge positive. On the other hand, established in a manner no less conclusive, we have the fact of the manifestations of revolting cruelty and foul injustice in the plan and government of the material universe. What escape from this dilemma can our empirical system discover?

Looking beyond these two facts, we plainly recognize a third—to wit, the limitation of man's capacity for knowledge. Bearing this third fact in mind, we perceive that there is nothing unreasonable in the suggestion that, among the vast body of concepts that man has as yet failed to grasp, there may exist one missing link to complete the chain of a generalization broad enough to embrace all the phenomena in one harmonious whole—the *Tertium Quid*, which, mediating between the opposing phenomena, shall cause the apparent discrepancy to disappear, supplying a more elevated point of view, from which we can recognize these diverse facts as equally-legitimate parts of a consistent and orderly system. In other words, we have but to assume the existence of an explanation, the nature of which it is impossible for us to fathom, and our Working Hypothesis is complete. Under this assumption we can proceed, according to experience, in the cultivation of fitness for, through the practice of, the Communion, with every scientific warrant for the expectation that, in the future as in the past, we shall reap because we have sown, and eat because we have

reaped, and find vigor and satisfaction in the nourishment: that as light cheers and warmth comforts the body, so will the spiritual food that we have thus systematically sought, invigorate the soul, and the spiritual light and heat thrill it with a beatitude beyond the keenest delights of the realms of physical or intellectual experience.

Were this resort to a hypothesis which we are unable to comprehend, in the nature of a new demand on human reason, a thing concerning which our experience in ratiocinative methods had nothing to tell us, there might be room for demur, for cavil; but such is by no means the case. Two examples will, it is confidently believed, suffice to set this matter in a clear light.

The first of these is drawn from the history of the modern developments in physical science. In the formulation of the undulatory theory of light, it was found that all of the ascertained phenomena connected with the subject could be reconciled by supplying a certain missing link in the shape of a lumeniferous ether, rigid enough to transmit inconceivably-minute vibrations through incomprehensibly-extended distances, yet so tenuous and unsubstantial that the vast stellar masses can whirl through it at speeds beyond the grasp of human thought, without recognizable retardation within the range of human observation since the eyes of men gazed upward at the stars in their courses, as they shone down upon the plains of Chaldea. This *tertium quid*, utterly irreconcilable in respect of its attributes, and beyond possibility of verification otherwise than by the fact of its fitness for the function which constitutes its *raison d'être*, is accepted

by the most rigid of the prosecutors of physical science as a working hypothesis which is to be received and acted on as positive knowledge, so long as no discordant phenomenon obtrudes itself on human observation. It is unquestioned, unquestionable, truth, so long as action taken in accordance with it invariably produces the results which it leads us to anticipate.

In our second example, we have a case more strictly analogous to that in hand than the foregoing: a case in which the same metaphysical method is employed upon a vastly greater scale of application, although the fact of its use has remained without special recognition by the comparatively few capable of instituting the analysis required for the detection of the method under the surface of their habitual practice. The facts in this case may be presented as follows:

A bird, perched upon a blossoming bough, attracts our attention by its graceful outlines, harmonious tints, and ravishing song. The testimony of our senses as to the actuality of the existence of this pleasing show of form, hue, and melody is positive, unmistakable. Yet what are the facts as revealed by the researches of physical science? In common with the rest of the universe, the scene of this radiant phantasmagoria is rayless as Egypt under the tenth plague, and silent as her sepulchres. Now we have here an exceedingly singular and perplexing state of things. Although it seems incontestable that the concepts ordinarily entertained respecting the world of matter, with all its familiar phenomena of color, sound, etc., is an erroneous one, and the scientific description of the same, inconceivable as, from a practical point of view, it is to us, is entirely correct; yet, notwithstanding all this, it

is not, the correct but the erroneous view that we must adopt, if we would secure that systematic adaptation of means to ends, upon which success in all human effort in the physical world is dependant. Were the cultivator to act upon the scientifically-established fact that all his concepts respecting the nature of his fields, crops, etc., their appearance and visible attributes, were simply the product of certain mental processes within himself, operating upon sense-impressions from without, which render a wholly false report of the things reported on, he would find it difficult to devise, from the scientific data alone, a plan of action whereby to keep himself and his family from starving on the territory on which, under traditional methods, he had been accustomed to live in comfort. In fact, no lesson of experience is more steadily, persistently, inculcated upon us than this, namely, that we must plan our action for the world as it seems to us, and not for the world as science, upon apparently incontrovertible grounds, tells us that it really is. But this is simply to assert that there are cases in which truth is misleading; error trustworthy. Now this is inadmissible. To accept it is to send man adrift on the current of events, without chart or compass, oar or rudder. Besides, it is, psychologically, impossible of execution. Human reason rejects such a proposition as the human stomach repels an indigestible substance. Where, then, lies the key to the enigma?

The empirical solution of the problem is as follows: —As the case stands, we have this situation; the customary theory of the material world gives success in action; the scientific view of it could not. But let us assume, as before, a lack of completeness in the sci-

tific conception—a something not yet detected, which, if recognized and brought into the case, would bridge over the gap, supply the missing link, and make everything harmonious and consistent.

We have spoken of this solution as practiced without special recognition of the fact. It would perhaps be more accurate to say that there has been no recognition of it whatever. But this point is comparatively immaterial. The essential thing is, that it is the only possible way in which those who accept the scientific interpretation of the facts of man's knowledge of nature can justify, on scientific grounds, their habitual methods of concrete action. This being the case, our proceeding, as above, in the solution of the problem of the reconciliation of the existence of evil with the phenomena establishing the exalted qualities revealed to us by our intercourse with the Spiritual Being to whom we refer the responsibility for that evil, is perfectly legitimate scientifically, according to the strictest prescripts of the empirical philosophy.

Reverting now to the case of the scientific agnostic, it would appear that his agnosticism could, with better reason, be applied to the nature of the *tertium quid* of the above hypothesis—accepting submissively the fact of the probability of its existence—than to the ignoring of the Spiritual Realm as a component part of the Universe. If the analogy of the cases of the theories of the lumeniferous ether and of the reconciliation of science with practice in the business affairs of life is insufficient to justify in his mind the adoption of a hypothesis so utterly beyond human comprehension as that required for relieving the mind of man from the incubus of the sense of the existence of evil, let him

recall another instance, in which, although the hypothesis is readily accepted by him and every other inquirer into the constitution of the universe, it involves as great a demand upon our recognition of the limitations of our capacity for knowledge as is called for in the case in hand. The instance is that of the generally-accepted theory of the share of man in the omnipotence which controls the realm of the Material. Can any mortal man reconcile his incontestable littleness with the fact that it lies within his will to alter the course of terrestrial events, with all the consequences involved as regards his own material experience and that of others : that he controls, to a large extent, the qualities of his own character, and influences the character of some beside himself? A sharer in omnipotence, an active co-partner in the daily regulation of the movements of the universe! It is as though one should speak of "the purposes of the Almighty" as being subordinated to the free pleasure — nay, the caprice — of his creature. Consider deliberately the feeble grasp which the mind can take of all the implications of this fact, and observe how utterly incapable it is of conceiving the arrangement under which the universe is conducted in accordance with this joint control. Could anything seem more extravagantly improbable, *a priori*? In view of such facts as these, there should, one would think, be little ground for demur at the demand for the recognition of the proposition that it is no conclusive argument against a hypothesis that we can not comprehend its details.

If, now, this statement of the situation is correct — if it is indeed the case that the scientific agnostic, in

common with the rest of the scientific world, is compelled to employ the device of the *tertium quid* in justification of his practice through the entire course of his dealings with the world of realities—what possible explanation can he offer of his refusal to bring the same logical expedient to the solution of the problem of the Existence of Evil? If we have overlooked nothing in our exposition of the ensemble of the facts of the case, the conclusion would seem to be irresistible that the only scientific treatment of that problem is the one which we have presented above as that of the empirical philosophy.

Dropping now the defensive, and assuming the offensive, position toward the agnostic's reasoning, let us inquire as to the outcome of his efforts to escape from the implications of the phenomenon of the existence of evil. He is compelled to resign both his scientific consistency and the benefits of the religious sentiment, and what he obtains for these sacrifices is a mental attitude of questionable desirability. He sacrifices scientific consistency so long as he refuses to apply to the problem of Evil the hypothesis of the *tertium quid*; and he reaches conclusions which, in final analysis, can yield but little satisfaction. The probabilities of a future individual existence must, in view of the phenomenon of man's participation in omnipotence—ignoring all other evidence to the same effect—be regarded as considerable; and the chances of the existence of evil in that extension of human experience are made noteworthy by the analogies of terrestrial existence. The most that the agnostic claims in justification of his course, is the fact of his incapacity to reason on the subject of the reli-

gious sentiment. But all that this position can secure to him is the dismissal from sight, but without impairment of its force, of the disquieting suggestion at the bottom of the question of what human future experience is to be. Surely, the situation can not be regarded as a satisfactory one.

On the other hand, what is the status reached through the empirical method, and what the sacrifices required for reaching it? In the first place, the existence of evil, instead of remaining a menace to whose voice a deaf ear is to be turned, is disposed of as a puzzle ultimately to be explained through the workings of the high attributes of our spiritual Sustainer, as revealed in the spiritual communion, and hence not to be permitted to darken the present with apprehensions of the future. Under this assumption the soul remains open to every spiritual satisfaction, every elevating influence, under the sway of the religious sentiment; and this result is attained with no sacrifice of logical principle, no violation of the laws of the systematic pursuit of knowledge. The contrast between this result and that achieved by the agnostic, is emphasized when we recall the bias which, as already described, must result from his position, warping his judgment when he approaches the momentous question whether the evidence available for the purpose is or is not adequate to establish the actual existence of the spiritual realm in the scheme of the universe. To the discussion of this question we now address ourselves; reasoning from the agnostic's point of view, as it may be presumed to be after the elimination from the data in the case, of the phenomena relating to the problem of evil. The agnostic

would appear to be unscientific from the empirical point of view, in that, in the absence of the repulsion toward the theory of the religious sentiment due to that problem, he rejects the generalization which correlates all of the remaining phenomena in one consistent ensemble. Referring back to the foregoing discussion of the evidence in support of the theory of the spiritual phase of human experience, it would seem inconceivable that any one, in the absence of bias, should find difficulty in accepting the conclusions there reached. But the agnostic's position is different. He would explain all the phenomena which constitute the above evidence by the hypothesis of self-deception. As this theory is applied to both the internal and the external evidences, it follows that the agnostic, by thus summarily rejecting the testimony of individual spiritual experience, cuts himself off from the really-conclusive part of the evidence in the case. It is true, he takes up the telescope through which the believer asserts that he perceives the evidence reasoned of, but he puts a closed eye to it. He must do his utmost to reach this point of view before he is entitled to affirm that the observations made therefrom are mistaken. He must, if it be possible for him to do so, visit the regions in which the believer declares that he finds what he bears witness to, before he can have a right to say that he knows that no such things exist there.

We now see wherein the agnostic must amend his position before he will be entitled to a hearing on scientific grounds, to wit., as follows: He must apply the logical device of the *tertium quid* to the Problem of Evil, thereby relieving himself of a bias as irresistible while in function as it is unscientific in

foundation.* This being accomplished, he must find a hypothesis which can explain the phenomena of the religious sentiment as satisfactorily as is done by the hypothesis to which our method leads up. Until these conditions have been met, there would appear to be nothing in the phenomenon of the existence of the agnostic philosophy to impugn the soundness of the empirical theory of the religious sentiment.

It may be inquired, "How is this point of view to be attained?" The answer is readily found in what has been said above in description of the phenomenon of the Spiritual Communion. One encouraging suggestion may be added here:—Has there ever been experience of a case in which the effort to realize that Communion, uncomplicated by non-essential details or mistaken associations, has failed of success?

In the above discussion of the several positions of those whose example makes against our hypothesis of the religious sentiment, we have endeavored to show that each of them is untenable because of flaws in the reasoning by which each of them is supported. Let us now inquire how the most philosophic of them stands the test of comparison with our hypothesis, regard being had to practical results. Having treated of them as unscientific in respect of their respective theories, we

* It may be objected by some that too much stress has been laid on the problem of the existence of evil as the chief stumbling-block in the path of the agnostic; but a reference to the works of such leading expositors of that system as the late Professor Huxley, in particular to his essay on "Evolution and Ethics," having regard less to particular forms of expression than to the general drift of the arguments, will be calculated to remove that impression.

take up the question of the scientific value of their practice as exemplified in the most favorable examples. By "scientific," thus employed, we intend to signify, not the consistent carrying out of a systematic plan of action, but that procedure which—no matter how originating—does, as a fact of experience, conform itself most successfully to the natural order and constitution of things. We take the cases of two individuals, representing, severally, two diverse methods of ordering the regular routine of existence, as follows :

The first of these examples will be that of an individual in humble life, of ordinary intellectual range, habitually inspired by a sense of duty which makes him a trusted employé, a respected neighbor, a beloved head of a household; his religious feelings narrow in range but deep and fervid—"who knows, and knows no more, his Bible true"; and when he closes it after the customary evening's reading, goes to his repose with a deep sense of peace that makes life very sweet and satisfying to him. Thus, simply in the satisfaction of his spiritual wants, he finds a solace for all the many shortcomings of his environment. Take this out of his life, with all that the suggestion implies, and how poor and bare the story of his earthly experience would be ! With this, how rich, how full of satisfaction it becomes ! He hath walked with God. What could be added that would not seem paltry in comparison !

Our second example is that of one whose experience of life is as broad and varied and full of satisfactions other than spiritual as that of the other was narrow, monotonous, and full of petty cares and drudgery. His exceptional natural gifts enhanced by the widest culture, his words hung upon in the most dis-

tinguished assemblies, his works eagerly sought throughout civilization, his social position the most enviable, his pursuits the most congenial, his every waking hour brightened by the consciousness of great opportunities nobly improved—what lacks he? Can he contemplate the fairest scenes of life with any real satisfaction, remembering all the while that the most radiant and joyous of these are but a fleeting phase of a mechanically-operated Cosmos, soulless, heartless, merciless? What suggestions can such incidents inspire but those of the disheartening reverse, deepening by contrast the ordinary consciousness of a Something too disquieting to be dwelt upon? Can he find, in the highest satisfactions which life has yielded him, release from a sense of need, of incompleteness, of yearning after an undefined Good, unknown to experience yet recognizable through the void which its absence creates? And when “the griefs that rob existence of its savor and turn its richest fruits to dust and ashes” invade the even tenor of his experience, what substitute can he find for that Arm of Strength on which, in such a case, the believer leans his human weakness, or for that Comforter who whispers in the ear of Faith words that fall upon the stricken soul like healing balm upon a wound? Beholding, in the one case, so much made out of so little in earthly experience, and, in the other, so little made out of so much, there seems to be no room for doubt regarding the decision. It stirs the heart to think how many wrongs would be righted if those who now figure as the express obstacles to the development of spiritual knowledge and religious sentiment should lead the van in this as in other forward movements; for—as already

remarked in connexion with the subject of scriptural inspiration—it is a great wrong to Science that the most conscientious should be deterred from its prosecution by the fear of the unsettling of their religious convictions, or by the repulsion excited by its attitude toward the religious sentiment. It is a wrong to Religion that it should be thought that the expansion of human knowledge makes against its security. It is a wrong to Humanity that its progress should be impeded by the fact that its great promoter, Religion, looks askance at the best friend of progress, Science; and by the fact that Science looks askance at Religion.

For the Agnostic System is not lacking in the Zeal of Humanity. Its philosophy of human action includes as a universally-accepted proposition this, namely, that the proportion of good to evil in life may be very sensibly affected by human action; and that, so far forth as we possess a power of bettering things, it is our paramount duty to use it, and to train all our intellect and energy to this supreme service of our kind. It realizes the pressing interest of the question, to what extent modern progress in natural knowledge is competent to help us in the great work of helping one another. It holds that the great intellectual difference between the old civilizations and that of to-day lies in the solid foundation we have acquired for the hope of success in man's attempts to subdue nature to his highest ends. To it it seems irrational to doubt that, even as the more distinctly-physical sciences—Astronomy, Physics, Chemistry—have, within the last few centuries, endowed man with a marvellous command over the course of non-human nature, so, eventually,

will Physiology, Psychology, Ethics, Political Science, work as great a revolution in the sphere of practice: and it sees no limit to the extent to which intelligence and will, guided by sound principles of investigation, and organized in common effort, may modify the conditions of existence.* We see, therefore, how immensely valuable to the cause of human progress would be the services of this group of philosophers, if persuaded of the reality of the spiritual equally with that of the intellectual and material departments of the universe, with all that is implied in such a conviction.

Reverting now to our original proposition, it would seem that in the case of the scientific agnostic, as in those of the Comtist evolutionist and the skeptical critic of the scriptural revelation, there is nothing, when the phenomenon has been systematically analyzed, to invalidate the Theory of the Religious Sentiment which our empirical method has enabled us to construct.

Having reached this point, we find ourselves at the end of our verification-test. We have brought our Theory of the Religious Sentiment into comparison with the facts of experience derived from a study of the phenomena, both of our internal consciousness and of the external world; the negative evidence in the latter case being drawn from the more prominent of the existing antagonistic systems. But there remains to be considered another system which, although by no means to be classed as antagonistic, does have so important a bearing upon our subject that it demands our most careful attention. We refer to the Synthetic

* See Huxley, "Evolution and Ethics."

Philosophy of Mr. Herbert Spencer. Instead, however, of proceeding at once to its consideration, much repetition can be avoided by first presenting a fuller exposition than has yet been given of the Empirical Theory of the Religious Sentiment, including therein the features thereof which have been derived from the Synthetic Philosophy; which done, the points of difference as between the two can be briefly presented and readily understood. In order to preserve the unity of this exposition, no distinction will be made between the points already brought out and those now set forth for the first time; the repetitions thus involved finding their justification, it is hoped, in the new connexions in which they appear.

What, then, do we seek? Knowledge—knowledge of a special kind. Our purpose is (1) to acquire such knowledge as shall enable us to frame sound Working Hypotheses for our guidance in the pursuit of the means of Satisfying our Wants; and (2) having gained this knowledge, to proceed to frame, in the light thereof, a system of such hypotheses. They are to be “sound” in the sense that they will enable us to work in consonance with Natural Law. At the present juncture, what we seek is working hypotheses relating to the satisfaction of our Spiritual Wants. Hence the immediate question before us is of the relation between Knowledge and the Religious Sentiment—between Science and Religion.

Systematic historical research will be found to exhibit this relation in a clear light, although in the absence of such it would seem to have been the subject of much misapprehension. Even the brief review of the facts of human experience in respect of the evolu-

tion of the religious sentiment which we are able to present in this place will, it is hoped, suffice to show that Science is to be regarded as the Elder Brother of Religion, the Intellect supplying—in varying measure, according to circumstances—the Soul with material out of which the latter, alone or with the aid of the former, frames its own conceptions, transmuting Knowing into Feeling. In varying measure, for—as we shall learn presently—the dependence of the Spiritual upon the Intellectual part of man's psychic constitution is a constantly-diminishing quantity, from completeness at the start, gradually declining to a position of comparative insignificance.

In the more primitive manifestations of the religious emotions, it is scarcely too much to say that Science supplies the mould in which Religion is cast. Observe, for example, the origin of some of the earlier forms of Nature-Worship. The cognizing-sense arouses the emotional-sense to communicate startling intelligence. "Come!" it cries, "and see what some terrible Thing has done! Behold the forest mowed down like grass, yon great oak riven to splinters, the drenched landscape, the roaring torrent!" And the emotional sense, overwhelmed with terror, replies—"Let us build an altar and offer sacrifices to this Unseen Power." Or take the case of Ancestor-Worship. Certain sages inculcate certain precepts for the regulation of social intercourse, which are found to work well in practice, as experience accumulates. The spiritual nature, craving some object of reverence, some arm of strength whereon to lean in its weakness, the intellect suggests, "Observe how much wiser is the parent than the child, the aged man than the youth, the men of old than the

men of to-day." And the spiritual nature responds, "Let us worship these wiser, these beneficent beings!"

Here, we perceive, the dependence of Emotion upon Knowledge is complete. The former is in verity cast in the mould supplied by the latter. But there is yet another sense in which the elder, is all-in-all to the dependent younger, brother. In order that the voice of the spiritual nature may be heard at all, the clamors of the material nature must, to a large extent, be stilled. The knowledge of the conditions on which nature will supply these material needs is therefore an indispensable prerequisite of the presence in the individual consciousness of a sense of any spiritual need of any sort. The facts of the case, therefore, at this stage of man's spiritual development, thus interpreted, render simply irrational the conception of an antagonism—especially a natural, inherent, and necessary antagonism—between science and religion, so far as this stage of religious progress is concerned. In fact, a systematic analysis of the related phenomena, not only of this, but of all the succeeding stages of this progress, makes it plain that, as a rule, the cases in which the defenders of the religious faith of any given people and period resist the acceptance of a new scientific truth because of its incongruity—as they assume—with their faith, are really examples of conflict, not between science and religion, but between the Old Science and the New Science: the psychological law of the Association of Ideas causing these believers to regard the repudiation of a cosmic conception which has always previously been bound up in their consciousness with their religious faith, as equally signifying a repudiation of that faith itself. But that such an assumption is not to be

adopted without systematic inquiry into the facts, human experience has already put beyond contention. The Christianity of to-day is certainly not less capable of defending itself against skepticism, nor less acceptable to the great body of its adherents, because of its abandonment at a former period, of the Ptolemaic for the Copernican Astronomy.

In the evolutionary history of religion to which our attention will be called presently, we shall be able to perceive how, from such beginnings as those described above, Science has continued to minister to Religion in a lesser and lesser degree as regards the materials for spiritual knowledge; but, as regards the satisfaction of the otherwise competitive material needs, there would seem to be no assignable limit to the inspiration which science can afford to a continually-progressive spiritual elevation through its continually-expanding command over the material resources of nature.

Having now, as a necessary preliminary, determined the question of the relation of science to religion in the more abstract and general aspect thereof, we are in a position to take up an inquiry of a more special character, to wit., whether the science of to-day, in view of the many and marvellous triumphs in the field of physical research which it has achieved since last it bestowed upon religion any marked furtherance in its development—otherwise than indirectly through the satisfaction of physical needs—can supply any knowledge which the spiritual nature, in *its* present stage of evolutionary progress, can make fruitful for its purposes.

Such assistance would seem to be eminently due, considering the extent to which religion has lost

ground during this period of scientific progress, through the conflict of the old against the new science mistakenly waged by Faith. One has but to recall the extent to which the earlier part of the present discussion was taken up by the effort to neutralize the effect of these different but all formidable renunciations of faith in the foundations of religious sentiment—each of them directly traceable to the growth and diffusion of scientific knowledge;—one has but to recall this, to be convinced that if science has anything at command useful for the cause of religion, it is high time in all equity that it should be forthcoming.

But that is but half the story. Look around upon the more conspicuous aspects of the civilization of the more advanced nations of Christendom, now in this closing period of our century, and say whether the symptoms are not disquietingly suggestive of a recurrence, in the case of Christianity, of that experience which is so conspicuous in respect of the other great religions, according to which the pure spirituality of the early beginning is gradually obscured under a load of rigid dogma or soulless ritual, or lost to sight amid the absorbing excitements of a feverish worldly existence. Do but note the evil portents of the closing years of the century; the frantic, headlong, pursuit of inordinate wealth; the riot of ostentatious luxury; the sacrifice of the Home to the exacting requirements of "Society"; the easy optimism which tolerates the conversion of politics into a trade whose motor-force is corruption; the prevailing cynicism which has well-nigh sneered reverence out of countenance, robbing youth of its chiefest attraction, and innocence of its surest safeguard against temptation.

and despoiling social intercourse of the charm once given it by a graceful courtesy, modesty, and kindness of manner, now displaced by insolent self-assertion and lackey-like superciliousness. But, more alarming, more discouraging, than this repudiation of simplicity in character and moderation in life—bad as it is, and its evils are impossible of adequate expression—is that social feature already alluded to as the *Gospel of Hate*. Its peculiarly-alarming aspect arises from the proportions which it is assuming, and the fearful risk of what may ensue if once its forces are let loose, burying the civilization so toilsomely built up in one vast chaotic wreck, one grand cataclysm, in comparison with which all past human experience has nothing to show in comparison. Its singularly-discouraging import lies in the fact that it should appear to be the final outcome of Christianity—the confident, impassioned, proclamation of some of the most humane and philanthropic among the votaries of that gentle and benign religious system. And all this under the inspiration of science—of a self-styled science calling itself *Economic*.

It is not to be disputed that there is another side to this picture. Behind all this carnival of reckless excess, this moral squalor under brazen display, the great heart of the people is sound ; their instincts and habitudes make for self-respect, moderation, and conscientiousness.

On the whole, we diagnose the symptoms as indicating in this Occidental branch of Humanity, for the great body an encouraging amount of health—an inheritance from a former period of firmer convictions, of a more distinctly spiritual life—but with evidences

of disease, due to the slackening of the religious tone, rapidly taking on a more and more dangerous aspect.

It is not without reason, therefore, that we now take up this question, namely, What can the resources of modern science avail towards supplying to religion the quickening influence of which it manifestly stands so much in need?

The Empirical Philosophy—the fuller description of whose method will furnish the subject of the opening section of the body of the present treatise—comes forward to submit to the judgment of the generation which is to round out the nineteenth century, its response to this appeal, as follows:

The science which it has to proffer to religion is a new science in certain particulars now to be explained. In the first place, it begins by limiting itself to the treatment of Tangible Realities. With these alone it concerns itself. Selecting for special study, as a natural phenomenon unmistakably approving itself as among the most real and tangible, namely, Human Wants, it inquires respecting their nature and the means of their satisfaction. It regards as an indispensable preliminary, the determination of the extent and character of the knowledge which the laws of man's psychological constitution place within his reach. The result is at first discouraging. It becomes manifest that man's knowledge of his material environment is very different from that which our established habits of thought would make it. Instead of that intimacy of contact which the popular apprehension regards as established by the agency of the senses, it recognizes the soundness of the doctrine of the accepted science of

the day that man cannot get outside of himself; that, for him, the sole materials with which he has to deal are the appearances of things as presented to his consciousness through the medium of his own psychic movements, and that these appearances, reports, representations, are often demonstrably inaccurate. But instead of contenting itself, after the manner of the science which may rightly be called old should the neo-empirical be found to endure criticism—instead of being satisfied to rest at this point on the conclusion that, since man's range of observation is confined to the subjective realm created by his own consciousness, the objective realm of absolute realities must be abandoned as utterly beyond human reach in the hopeless category of the Unknowable;—instead of this, and in obedience to the cardinal principle of its method, to wit., the exhaustive search for overlooked phenomena, it pursues its researches until it comes upon facts which turn its discouragement into confidence, and its disappointment into a pleased surprise. This comes about through its happy choice of the subject of human wants. In the study of the phenomena connected with that subject, it becomes manifest that man, simply following up, in blind empiricism, methods which somehow brought success, has arrived at such a degree of positive knowledge of that realm of objective actualities that he can plan, with assurance of success when he overlooks nothing, courses of action based wholly on the assumption that his conceptions of certain features of that "unknowable" world are correct. Furthermore, these plans relate to a vast and constantly-increasing variety of material wants, thus indicating a correspondingly-extensive acquaintance

with the correlated objective realities. Not only so, but the cumulative principle so manifestly at work—each new discovery in the pursuit of the command of man over nature constituting new vantage-ground for reaching further discoveries—and the amazing experience of the latest half-century, suggest the extension of this objective knowledge, in the long future of humanity, beyond the mind of the humanity of to-day to conceive. Thus, so far as relates to material things, our mourned tangibility of knowledge is restored to us; in so far as relates to a wide range of the requirements of our material existence, our knowledge of the world of objective realities is adequate, tangible, complete.

How stands it, then, as regards that class of wants which at present expressly concerns us—the spiritual? Here the new science has a field of action differing in some features from that presented in the case of the material needs. In the latter instance, the Physical Sciences, in their “applied” aspect, supply, ready to hand, an endless number and variety of proofs of intimate knowledge of objective realities on the part of humanity. But in the present case things are different, seeing that there is no such thing as a spiritual or religious science. The empirical philosophy therefore must needs frame one. But again our Want-Subject leads us toward the light. We ask, What are the phenomena of the satisfaction of the spiritual needs of humanity, considered from a purely-scientific point of view—that is, regarded simply as a natural phenomenon? What are the means whereby their satisfaction is secured? With all the world of significance which we shall find to attach to the answer, it is an easy, an obvious, one. The whole matter, in large

and in small, in general and in detail, is included—as a pearl of great price in a little locket—in the brief expression, the Spiritual Communion.

But if it was necessary for the empirical philosophy to supply its own science of spiritual want-satisfaction, there can be no question as to the completeness with which the gap has been filled, so far as relates to the adequacy of the proof of the positive knowledge of objective realities in the realm of the spiritual, derived from the success with which men are able to go about procuring such satisfaction. No phenomena are discoverable which refuse to conform to the generalization that, through the spiritual communion, the result sought can be confidently looked for. Not only so, but—as already noted above—not a case is on record contradictory to the common experience that, wherever sought for according to the conditions prescribed by empirical science, the communion has been found. To each one that has knocked, the door has been opened; each one that has rightly sought, has found.

The new science further proffers a more systematic and concise conception of this instrumentality for the satisfaction of the spiritual wants of humanity, as follows :

In the preliminary discussion which leads up to a more direct exposition of the Theory of Human Progress, in its appropriate place in this work (see page 161 *infra*) attention is called to the advantages to be derived, when dealing with a mass of discordant phenomena, from the discovery of a great co-ordinating concept—the subjective representative of the great controlling principle in the objective reality—to which each phenomenon in turn can be referred, and thus the

distracting complexity of the data reduced to order and system. Such a function in the present instance is performed by the spiritual communion. The more we penetrate into the related facts, the more completely we accumulate the historical and other phenomena, the more strikingly will this truth be displayed. We shall find it to be the one Great Religious Fact of men's terrestrial experience. It is the Alpha and Omega of his spiritual life. With it, everything ; without it, nothing.

Thus equipped for the work, we shall find little difficulty in arranging in comprehensive order the facts with which human experience supplies us on this subject.

As a rule, the various religious systems present substantially the same phenomena in respect of this matter. Each originates with an individual, himself full of the inspiration which he has derived from this spirit-to-spirit intercourse, and which he succeeds in so impressing on his immediate followers as to lead them to the same source of spiritual exaltation. The greater the success of the movement, the sooner it takes form as a Cult, and the process of despiritualization is inaugurated, and thenceforth goes steadily on ; dogma and ritual, in a constantly-increasing measure, providing a substitute for the intercourse of spirit with spirit, satisfying the spiritual needs, and thus destroying the impulse to seek the spiritual communion, and filling the believer with husks till he ceases to long for the grain.

The system which so especially concerns us—namely, Christianity—as we have already seen, would seem to share the same experience. We cannot better

epitomize the much that might be said on this point than by an extract from a work which presents the latest word of a school which may be described as uniting a truly scientific method with a genuine spiritual-mindedness, namely, the recently-published *History of Religion*, by Dr. Allan Menzies. Speaking of the simplicity of Christianity in the mouth of Christ himself, he says :—

“Jesus . . . did not feel called to draw up rules for a new faith, and the result of this is that the mechanism of the religion is of later growth. The authority of the founder can be appealed to for a direct and constant intercourse with God, as of a child with his father, and for the conduct of men towards each other which such intercourse with God necessarily implies, but for hardly anything more.”

Such a statement from such a source suffices in itself—though of course its verification is within the power of every intelligent inquirer—to show that the unmistakable decline in the spiritual efficiency of the religion of Occidental civilization is in some measure due to the deadening influence of a too thorough-going insistence upon ritual and dogma ; at the same time it cannot be denied that the like unfavorable influence must be attributed to the teachings of science, as so widely promulgated in these later times. This assertion can readily be made good, as follows :

An analysis of the related phenomena leaves no doubt as to the nature of the antecedent of which this weakening of the religious sentiment is the consequent. This weakening is simply another term for a decline in the spiritual communion, and this decline is traceable in a large measure to the removal of the Deity further

off from humanity. Now, this is precisely what modern science has been doing. It has allowed itself to remain absorbed in the study of a part only of the phenomena of nature, not recognizing, as it should have done, the spiritual phenomena of human experience as belonging to that category, notwithstanding the fact, which we have found so easy of recognition, that they are such in the strictest sense of the term.

This truth is illustrated by the forms of skepticism treated of in the earlier part of the present discussion. The Comtist overlooks the phenomena which refuse to be generalized as mere natural outgrowths from the original "theological" stage: the revelation-denying skeptic overlooks the phenomena of spiritual growth from the soil supplied by the Hebrew and Christian scriptures; and the agnostic overlooks the phenomena which, properly weighed, conclusively establish the existence of the spiritual realm as a veritable constituent of the universe. In protest against all these, the Synthetic Philosophy comes in to rebuke the unscientific godlessness of this *soi disant* science, and to establish on an impregnable basis of *a priori* reasoning, the veritable existence of God as the Unseen Power, of which all the phenomena of the material universe are simply manifestations. But it restores Him only to set Him upon an inaccessible pinnacle. He is the Unconditioned, the Unknowable. This is not the Deity of the Spiritual Communion.

How, then, shall Science correct the evil that Science has wrought? The Empirical Philosophy expounded in the present treatise undertakes to suggest hypothetically the following response to this appeal:

In the first place, it bases its claim for a hearing on the fact that, whereas all of the metaphysical systems which have been concerned in undermining the religious sentiment have, in their *a priori* methods, been subjected to the risk, and have actually incurred the disaster, of leaving out of their reckoning factors in the absence of which their conclusions could not be other than misleading. The distinguishing feature of its method is the reasoning from a systematized ensemble of all the essential related data—a condition secured through the practice of an exhaustive search for neglected phenomena.*

Thus warranted, it undertakes the duty of ministering to religion as inculcated by its own doctrine of the relations that should obtain between the two.

Where, then, shall it find a starting-point? What shall be the character of the knowledge which it should impart? The answer is not far to seek. We recognize the fact that whatever science has done toward obstructing the way to the spiritual communion, by making the Deity more remote, has been effected through its Theory of the Cosmos. Nay, if we cast a comprehensive glance over the great religions of the world, we find that, for most of them, when we know its theory of the cosmos, we know the framework of its religious system. In the case of Ancestor-Worship, and in that of Buddhism, in so far as it is independent of Brahmanism, the question is ignored. But this is

* As regards the Synthetical Philosophy, the phenomena overlooked by it in common with the skeptical systems, are those of the spiritual communion which supply empirical proof of the accuracy of man's knowledge of certain aspects of the Divine Nature. Consult further page 117, *infra*.

exceptional. The designations alone—as in Nature-Worship, Pantheism, Polytheism, Monotheism, and the like—often suffice to indicate their dependence on the theory of the universe; and in the case of such comprehensive categories as Semitic, Aryan, etc., we may repeat, with substantial correctness, the statement above, that, given the Cosmos, we have the Religion.

This striking illustration of the relation between Science and Religion, then, serves to indicate the direction in which the Empirical Science should operate. It proffers to religion its own cosmic philosophy, and this with an especial view to its bearing upon the Spiritual Communion.

It will be obvious to the reflective mind that the new science is confronted here by a problem of no ordinary difficulty. From the spiritual point of view, the essential question of the Cosmos is that of the attributes of the Power of which it is a manifestation. But observe the complexity of the phenomena. On the one hand, we have the phenomena of human experience in connexion with the Spiritual Communion. How much akin, how intimate the companionship of spirit with spirit—the human with the divine—when the human spirit, bruised and broken by the storms of adversity, the shock of bereavement, casts itself upon the bosom of the Divine Consoler, and finds a loving welcome and soothing caresses there! Upon the other hand, how does the human spirit shrink into conscious nothingness in the presence of this unspeakably, unthinkably, vast—this awful—universe! How does the brain reel under the attempt to grasp its limitless proportions, the soul stand paralysed by the

thought of the ineffable majesty and grandeur of the Being to whom all this may be but as a grain of sand to the globe we inhabit, in comparison with other manifestations of His tremendous sovereignty, and the still more paralyzing consciousness of the utter incapacity of the mind to grasp the comprehension of the distance between its own poor symbolical concepts of His attributes and ways, and the actualities thereof.

But it sometimes occurs with problems of the greatest apparent difficulty, that the mere preliminary formulation of them evokes a suggestion of the solution. Such would seem to be the case in the present instance. The Empirical Philosophy, taking up the ensemble of the related phenomena which have come within the range of its powers of verification, has framed therefrom a theory of the Cosmos which would seem to offer a generalization which co-ordinates satisfactorily all these phenomena.

Before presenting it, however, it will be in order to suggest certain considerations pertinent to the occasion, as follows :

In order that the service which Science shall render to Religion shall be wholly satisfactory, the knowledge which it communicates should be in the nature of a finality. There should, if possible, be an end put, once for all, to those bickerings between the two over the reluctance of Religion to abandon the position into which Science has at some previous time persuaded or compelled her; Religion battling each time for that which has become precious to her, while to Science, in the light of new knowledge, it is manifestly untenable. Now at last Science should be able to invite Religion

into her perennial home, the temple whose framework is complete, so that all that remains for Science to do for her is to employ its further discoveries as adjuncts—valuable, indeed, for adornment, but in no respect affecting the proportions or the strength of the structure, as such. Or, stated in the more direct and concrete language dear to empiricism, the crowning gift of Science to Religion should be that knowledge of the material and spiritual Cosmos which shall put the soul of the believer into such an attitude toward the Spiritual Communion, that henceforth that communion will be to him an all-sufficing source of knowledge relating to things spiritual; so that, for him, in the spiritual as in the material realm of his existence, adequate provision will at last have been made for the continued evolution of further command over the means of supplying his wants:—in the material, through the indefinite continued expansion of the Physical Sciences; in the spiritual, through a similar expansion of spiritual knowledge obtained through the the Spiritual Communion.

Now, it is manifest that, to meet such requirements as these, the knowledge which Science shall have at command, in a shape to communicate it to Religion, must, under the special circumstances of the case, include a teleological explanation of the cosmic phenomena. In order that it shall be adequate to the needs of Religion, it must include an explanation of the purposes of the Spiritual Being behind the material Cosmos in framing the latter as it is; especially, and above all other considerations, his purposes toward humanity in connexion with the Cosmos. It is, of course, needless to enlarge on this point. All is too obvious

to call for anything beyond the mere suggestion.*

* There would appear to prevail in some quarters a certain confusion of thought respecting the introduction of teleological considerations into scientific research, which must not be allowed to obstruct the current of our reasoning in the present instance. So long as we are prosecuting the ordinary line of scientific inquiry—so long, that is to say, as we are simply trying to trace a certain phenomenon or group of similar phenomena back to the principle of natural law of which it is, or they are, the result—the introduction of the arbitrary will of a controlling power signifies nothing more nor less than the closing of the inquiry without scientific result; but such a procedure has nothing in common with the teleological reasoning referred to in the present instance. When the matter inquired about is of such a nature that after it has been treated according to legitimate scientific methods, each related phenomenon being traced back to its underlying principle, and this work prosecuted to a point at which it becomes possible to discover a single purpose running through the whole, so that it can be seized upon as the co-ordinating, all-explaining, concept, nothing is more legitimate, according to empirical rules, than that this concept should be adopted—should be reasoned upon as an ultimate datum, acted upon as a sound working hypothesis—so long as no fact of experience or observation comes within our knowledge to disturb the solidity of the evidence on which it is based. In point of fact, when a case of this sort occurs, so that we are able to stand at the end of the series of successive phenomena, as it were, and look back over the ensemble of the chain of related movements, all our work in seeking out the underlying reasons of each phenomenon seems to be nothing more than a series of successive steps taken in order to reach this teleological point of view;—mere means of arriving at that end.

The great importance of the teleological feature in the present instance will be sufficiently obvious. The only legitimate subject for discussion respecting it will be that of the extent to which the teleological inferences are justified by the data from which they are derived.

Among the most striking of the phenomena which engage the attention of the empirical seekers for a theory of the Cosmos are those which reveal the existence of features in the cosmic structure which evidently bear no relation to the existence of man. There are things to be seen which no human eye can detect: things to be heard which no mortal ear has ever reported to human consciousness. Receding further and further from the field in which these phenomena so closely related to human experience obtain, we recognize, with less and less distinctness, the evidences of a relation between certain features of the material universe and sentient beings better fitted than man for such relation. According to the empirical system, there can be but one interpretation, under the laws of man's psychic constitution, of this class of phenomena. There is one concept that reduces all of these cognizable by man into a single generalization; and loyalty to that system compels our provisional acceptance of it as sound, so long as no discordant phenomena is recognizable. This concept presents a theory of the Cosmos, as follows:

The Cosmos cognizable by man through the portion thereof which comes within his ken, is a complex whole, made up of an infinite number of component parts or units, each of which has its *raison d'être* in the fact that it is intended to minister to a special Intelligence fitted to it, and to which it is fitted. It is a Macrocosm composed of an unthinkable number of Microcosms, of which one is specially devoted to the needs of humanity—that is to say, humanity is the Intelligence to which one of these microcosms is intended to minister. We have, of course, no sub-

stantial data wherefrom to draw information on the question of the extent to which this microcosm of ours differs from or resembles the other units of the infinite whole. Yet there are features respecting which we can scarcely be mistaken. It seems obvious, for example, that we must not conceive these units as separate and distinct parts, such as the separate geographical divisions of the surface of our little planet. On the contrary, the very phenomena that we were moved to cite in proof of the existence of "other worlds than ours" are phenomena of our own unit, showing that—to a certain extent, at least—the physical areas may coincide or overlap to any extent, thinkable or unthinkable, and that the lines of limitation for each Intelligence ministered to, are those which define the range of the cognizing faculties of that Intelligence. Thus—for illustration—the human microcosm has been enlarged by the artifice of man in the construction and use of the telescope, microscope, spectroscope, and other aids to his natural powers of observation. In this way are set the boundaries of his objective microcosm. The subjective area is, of course, wider by so much as thought can travel farther than the physical senses; yet even here the laws of man's psychic nature limit the range to proportions infinitely minute in the presence of infinity itself. Man's place, therefore, in the macrocosm is utterly insignificant. This moves us to inquire as to the religious aspects of his position in this environment. The spiritual hopelessness of his position is as manifest as his material insignificance. The Deity, remote, awful, unknowable,—how would it be possible, man's psychic constitution being what it is, for him to conceive those sentiments

which give him fitness for the spiritual communion? Where, in a soul so entirely possessed by awe, could be found a place for love and confidence and abiding trust in a more than reciprocal sentiment of tenderness and affectionate interest? But here, appalled, we fall back upon the phenomena of the spiritual communion, and perceive at once the teleological significance of the phenomena of the microcosm of humanity, rightly understood. The dread Sovereign of the macrocosm here throws aside His state, and becomes the devoted parent, the virtue-inspiring counsellor, the tender consoler and comforter. By virtue of his infinitude, He is able to be thus present as the spiritual inspiration of each Intelligence which he has created, and, with and for it, its arena, and at the same time be wholly present in each soul that calls upon Him.

It is vain for us to inquire whether all these microcosms, like humanity's, are arenas of evolution, each one ministering to that purpose in behalf of its correlated Intelligence. We may not know. We have no need to know. It is not given to us to know. The lesson is impressed upon us with irresistible force that—however it may be with the rest—with us at least, in our appointed sphere, our business is to accept the proud position offered us of a co-worker with the All-Powerful, a co-planner with the All-Wise, in His chosen project of the evolution of humanity from the humblest beginnings, through inconceivably-protracted periods, marked by an endless variety of vicissitudes, up to that purification and exaltation which shall make humanity worthy of the love and companionship of the All-Perfect One.

The business of our empirical science is therefore

chiefly with the microcosm dedicated to humanity. Our theory of the macrocosm has pertinence to our science in so far as it separates—and thereby enables us to set aside—the phenomena which repel the soul of man from the spiritual communion through the sense of awe and remoteness which they inspire; and, to our limited comprehension, it renders the necessary anthropomorphization more thinkable. But our special microcosm is so much more closely bound up with all our needs, that, for the sake of convenience, we shall henceforth in this discussion—with such exceptions as circumstances may make advisable—refer to the microcosm of humanity as “the Cosmos,” and, when allusion to the macrocosm is intended, we shall specially indicate the fact.

It will now be easier to understand the reason of our late—perhaps overmuch reiterated—insistence upon the absolute, unqualified, identity in the character of our knowledge of the spiritual, and of the material, departments of the universe, respectively. It will be remembered that we showed our knowledge of the material realm to be less tangible, our knowledge of the spiritual realm to be more tangible, than we had conceived: that the only ground on which we could admit the reports of the consciousness respecting material phenomena, was the fact of their enduring the test of success as sound bases for working hypotheses, and that our knowledge of the spiritual realm was admitted on precisely the same examination. This demonstration serves our turn now. The empirical science, regarding the Cosmos from a strictly scientific point of view—that is, regarding it simply as a natural phenomenon, as a whole and in all its parts—considers

the Divine Presence therein in that light solely, and—for the reasons just recalled above—demands of human reason that it shall recognize the tangible reality of that presence, as fully, as completely, in every respect identically, as it recognizes the tangible reality of the presence of a book held in the hand, of the chair in which the reader sits, of the air he breathes, of the light he reads by. It requires that he who accepts it shall accept, shall know, shall *feel*, at every moment of his conscious existence, wherever he may be, the fact that *God is there also*.

This is easier said than done. To gain an intellectual conviction of the truth of a certain proposition, setting forth a certain state of things as existing at a given time and place, is one thing; to gain a realizing sense, a constantly-abiding consciousness, of the same thing, is quite another. This is pre-eminently true in a case like the present one, in which all the mental associations and habitudes of a lifetime, and all the external appearances of things, combine in insistence to the contrary. Yet the great truth that knowledge is the elder brother of sentiment holds good here as elsewhere, and knowledge—science—which is at once knowledge and the seeking thereafter—will not be gainsaid. The psychic nature of some men is such that a right appeal to their reason, an appeal that they can comprehend, will be responded to, sooner or later. There are natures to whom it is an impossibility that they should go on for ever denying that which their reason has accepted as undeniable. If our empirical philosophy has lived up to its principles, and hence has neglected or overlooked no essential factor, human reason, wherever skilled in ratiocinative operations,

must accept its theory of the Cosmos, and in so doing place the individual reasoner on the strain of the consciousness that he is living under a false conception of the nature of his cosmic environment. Once that this idea gains an entrance into the mind it will—*crede experto*—continue to return with greater and greater frequency and intensity until it becomes an ever-present suggestion, a continuous or nearly-continuous under-current of thought. Thenceforth, the growth of the realizing consciousness of the real state of things, under the stimulating influence of the backing of the intellect, is steady and rapid, although it would seem that it is never to reach completion: new phases, new features, new implications, constantly disclosing themselves: one unmistakable indication being ever recognizable, to wit., that although the whole movement is an evolution from a small beginning, it is a natural growth based upon the innate psychic constitution of humanity.

When the knowledge of the Cosmos has begun to assume an approximation to this character in the mind of an inquirer, he will see the spiritual communion in a new light; it will carry a new significance. We may now, therefore, transfer our attention from the Cosmos to the Spiritual Communion; studying it solely as a natural phenomenon whose phenomena of detail will be analyzed in pursuit of such suggestions as the process may yield.

The Empiric Philosophy makes this spiritual intercourse the necessary concomitant of religion, and it is therefore without surprise that we observe suggestions of it in our description of the first institution of nature-worship, where even Fear was seen to serve as an incitement to the attempt to establish relations with

the god of the tempest. What is genuinely surprising is the high degree of development which the conception had reached in times which we regard as early in the history of civilization. Listen, for example, to this voice which comes floating down to us out of the mists of the distant past :

“O Lord, thou hast searched me, and known me. Thou knowest my down-sitting and mine up-rising; thou understandest my thought afar off. Thou compassest my path and my lying down, and art acquainted with all my ways: for there is not a word in my tongue, but, lo, O Lord, thou knowest it altogether. . . . Whither shall I go from thy spirit? or whither shall I flee from thy presence? If I ascend up into heaven, thou art there; if I make my bed in hell, behold, thou art there. If I take the wings of the morning, and dwell in the uttermost parts of the sea, even there shall thy hand lead me, and thy right hand shall hold me. If I say, Surely the darkness shall cover me; even the darkness shall be light about me. Yea, the darkness hideth not from thee; but the night shineth as the day: the darkness and the light are both alike to thee.”

Very similar, not only in exaltation of sentiment, but in clearness of conception, are the outgivings of the founders of those other highly-spiritualized religious systems recently alluded to above. Coming down, at a single step, from long by-gone times, we quote again; this time from an authority already cited, namely, *The History of Religion*, for the sake of the clearness with which they present the recognition of the essential principle of the Spiritual Communion under a great variety of conditions:

“Religion is not only belief in the higher powers, but is a cultivating of relations with them” (p. 8). “Religion is not present unless there be not only a belief in higher powers, but an effort of one kind or another to keep on good terms with

them" (p. 8). "The savage has no hope from the Spirit, and does not seek his intercourse" (p. 31). "Where the sacrifice is a meal, intercourse is sought for" (p. 66). ". . . sacrifice was an act of communion, in which the god and his human family, partaking at once of the same victim, proclaimed and renewed their unity with each other" (p. 68). "The old social aspect of sacrifice grows faint" (p. 69). "Shamanism . . . the belief in a hierarchy of spirit . . . does not merit the name of religion, since the motive operating in it is that of fear alone, and no friendly relation has yet been attained with the unseen power" (p. 92). "Neither Confucianism nor Taoism is a religion in the full sense of the term, as supplying by intercourse with higher beings an inspiration for life" (p. 120). ". . . that spot was recognized as a holy one, where communion could be had with the Deity, and the apparatus of worship was erected there so that the intercourse might be suitably carried on, as Jacob is reported to have done . . . at Bethel" (p. 161). "In early Semitic sacrifice . . . the people dance and make merry before their god, of whose favor they have just become assured once more by the act of communion they have observed" (p. 162). "In the culmination of the moral development of the religion of Israel, Man's intercourse with God is to be kept up as that of an affectionate human relationship, into which no motives either of force" (fear) "or of commerce" (favor-seeking) "enter. Although God is just and holy, he is perfectly placable, and ready to greet the approaches which are made to him. It is absurd to spend so much money and toil on sacrifice when the happiest relations with God can be obtained so much more simply. God forgives without any sacrifice; his love and his desire to meet with love surpass all that human relationships can show; his constancy is like that of the returning seasons, or of the stars. He yearns over Israel as a father over a wayward son, and will leave nothing undone that he can do to bring his son back to him. . . . He will change man's nature, and give him a new heart, if nothing short of that will suffice; or he will change his own procedure entirely, and deal with man not by way of commandments, but by way of inspiration, placing his law in man's inmost heart, so that the great union of God and

man may be attained, which he desires" (p. 193). The Vedic religion:—"The gods are great beings, and religion consists in intercourse with those great beings" (p. 331). The Persian religion:—"The spiritual life is not left to stand alone. There is a personal walk with God" (p. 393). "In the chapter on the religion of Israel, we saw how the prophets before and during the exile began to cherish the idea of a new relation between God and man, which would not depend on sacrifice nor be confined to Israel. God, they declared, was preparing a new age, in which he could receive man to a more intimate communion than before; and man would be guided in the right path, not by covenants and laws, but by the *constant inspiration of a present deity*" [italics ours] (p. 410). Under Judaism, "the *sense of the divine presence grew faint*" [italics ours] (p. 411). Christianity: "The long-expected intercourse of God and man on new terms of perfect agreement and sympathy, had come into operation: anyone who chose could assure himself of the fact. . . . The great God seeks to have every one living with Him as His child; and religion is no more, no less, than this communion. . . . The individual—every individual who will pause to hear—is assured that there exists between God and him a natural sympathy, and is urged to allow that sympathy to have its way. It is easy to see what effect such a belief must have. The individual, bidden to seek the principle of union with God, not in any external circumstance or arrangement, but in his own heart, becomes conscious of an inner freedom from all artificial restraint. He finds in his own heart the secret of happiness, and is raised above all fears and irritations; and hence the forces of his nature are encouraged to unfold themselves freely. . . . As God has come down to him, he is lifted up to God; a divine power has entered his life, which is able to do all things in him and for him. . . . Even religious duties are left to form themselves naturally; all that is insisted on is that the child shall have living and real intercourse with the Father" (pp. 411-414).

There is no need of carrying this line of investigation any farther. It is already sufficiently manifest that the

knowledge of what our empirical philosophy designates as the spiritual communion has been revealed to man, in every essential feature, at sundry times and in divers places. Especially is this true in respect of Christianity; a case in which the essence of the message which its founder came to deliver is the revelation of the parental relation which God stands ready and anxious to assume to all who enter into communion with Him in the spirit of the affectionate and obedient child toward its parent. How comes it, then, that having once known this all-sufficing spiritual truth, men should fall away from it into indifference and neglect?

It is to be noted, in the first place, that it is of comparatively a very few of whom it is told that they have actually had this beneficent experience: and secondly, that it is not of individuals, but of successive generations, that we speak, when making reference to the falling-away from these high privileges. Individual fitness was rare, and the right individuals did not present themselves to take charge of the sacred fire when those who had kept it bright upon the altar set up in their hearts, were themselves chilled by the hand of death. On close analysis of the phenomena, it is plain that the actual function of the spiritual communion has been very limited; first, as regards the number of those who have realized it fully, and, second, as regards the extent to which it has been understood and appreciated by the greater number of those who have had any experience of it whatever. These considerations make it easy to understand how ritual and dogma could dull the edge of religious zeal by presenting an alternative means of satisfying the spiritual needs of the less spiritually-minded, and how

Science could discourage the aspiration of the soul after the spiritual intercourse, by removing the Deity to remote and inaccessible heights, with clouds and darkness round about Him. We also begin to have some realizing sense of the inspiration to the cultivation of fitness for, and an earnest desire to enter into, the communion, which must flow from the acceptance in the soul, as in the mind, of the empirical theory of the Cosmos, with all the implications connected with its doctrine of the actual presence of the Deity during every conscious hour of the existence of every individual. Let us try whether we can increase this clearness of conception by an attempt to picture for ourselves the scenes which must occur when the realizing sense of the Cosmos as it is, comes to different souls in different stages of spiritual development. We place before ourselves in fancy, one, the accumulated depravities of whose life has estranged him utterly from every pure thought, every spiritual aspiration, who, having fallen asleep in the accustomed state of moral insensibility to the existence of a spiritual element in the universe, suddenly awakes to the full consciousness of the presence of the Divine Spirit, bending on him a look which remains in his eyes though he has buried his face in his pillow. Imagine the sickening despair that must come upon him with the thought that he is condemned for life to this detestible association!

When a new gang of convicts condemned to the French galleys are turned over to the prison authorities, they are told off in pairs, each pair being then coupled together for life by handcuffs and a link riveted into place. It has been asserted that, in cases where a convict of refined personal habits has been thus coupled

with one of brutish ways, the repulsion is sometimes as great on the part of the fetid product of the slums as on that of his delicately-nurtured mate, and that there have been instances in which the coarser of the two has actually murdered the other in a manner indicating the greatest ferocity; declaring afterward that the decent instincts of his inseparable companion had wrought him up to such a pitch of detestation that death itself, solaced by the revenge obtained, was preferable to life under the existing intolerable conditions. Whether the story describes an actual occurrence, may be open to question, but that it has adequate warrant in human nature, is less so; and it is no strain upon the fancy, in the case before us, to picture a crushing weight of hopelessness settling down upon the sordid consciousness of the embruted wretch, making him ready to cry out with frantic Ferdinand : "Hell is empty, and all its devils are here." On the other hand, in the case of one whose highest satisfaction in life has been for long derived from the soul's communings with its spiritual companion, imagine the burst of gladness with which such an awakening to a realizing sense of the Divine Presence would flood the consciousness:—the unspeakable joy of the vision of a new heaven and a new earth, as the theater of his remaining earthly existence. No such instance of either extreme can, of course, occur in concrete human experience. The revelation will come, when it comes at all, by slow, perhaps insensible, gradations. But it is competent for us to employ such hypothetical cases as starting-points whence to reason according to the circumstances of each individual's spiritual development. Fancy, for example, the sordid money-slave, the self-indulgent pleasure-

seeking, duty-shunning, man or woman of the world—anyone, in short, to whom, for any reason, the voice of conscience is not a welcome one—what a world of dismay for such is involved in the thought that thenceforth their lives must be passed in the closest intimacy of contact with this Other Being! Nothing can be better to familiarize us with the thought of this than the habit of recurring, from time to time, to the contemplation, in imagination, the experience of others, as already described and illustrated above; how the first rude awakening shall be to those to whom the discovery is unwelcome will be suggested above, be softened by the gradual transit of the mind from incredulous surprise to final conviction; how the embarrassments of the situation will gradually be relieved in part by the familiarity that comes with usance, in part by the gracious attitude of Divine Participant, full of the tenderness which recognizes the not wholly self-created proneness to transgression; how, to many of those to whom the first sensation is one akin to consternation, the second will be an impulse to frank recognition of the situation, and a determination thenceforth to follow, so far as the natural man within will allow, the influences of the intercourse, in order to seek to realize to the full its delights; not the least of the measures to that end being the schooling of conscience, instead of dwelling despairingly on “Exceeding Sinfulness of Sin,” to recall the loving kindness with which every previous return from wayward paths has been met.

These forecasts might, of course, be extended indefinitely, but enough has probably now been done in this direction, to give us a sufficiently adequate concept

of the great spiritual movement which must result in the event of the acceptance of the Empirical Theory of the Cosmos, and thus to clarify our ideas respecting the value of the gift which Science will confer on Religion in placing this instrumentality in her hands. The matter would seem to take shape as follows:—

The phenomena of the Occidental civilization of to-day point to a most unsatisfactory condition of things, as exhibited in the unmistakable symptoms of a decline in the efficiency of the religious sentiment as embodied in modern Christianity. Beneath the more threatening indications everywhere visible on the surface, there yet remain wholesome elements of character in the masses of the people, who, while not sufficiently inspired at present with religious conviction and aspiration, are nevertheless capable of supplying the foundations of a great progressive movement, if only the energizing religious element could be provided. That element would be available upon a vast scale, were it possible to bring the masses of the people into the habitual practice of recourse to the spiritual communion. This recourse could be secured, were the masses in possession of an adequate realizing sense of the nature of their environment,—were they possessed of a right conception of the Cosmos as it is expounded by the Empirical Philosophy.

This conspectus of the situation provides the materials for an exceedingly clear, comprehensible, and—if the expression is pardonable in such a connexion—business-like conception of the service which the new science can render to modern religion, and of the manner in which religion can avail itself thereof. Let us try to put this conception into words.

Science, represented by the new empirical form

thereof, proposes to equip the custodians and promoters of religion for the discharge of two separate functions ; namely, first, to establish among the leaders of thought the Empirical Theory of the Cosmos as the universally accepted doctrine of modern science; and second, to establish among the great body of the population the Spiritual Communion as the one great vitalizing force, the source of all spiritual knowledge, all religious feeling.

The first of these functions, while exclusively scientific in method, is wholly religious in purpose; its aim being the creation of a non-questioning acceptance among all intelligent people of the empirical Cosmos as a conclusively-established fact: the idea being that without this there can be no true conception of the spiritual communion , whereas, with the acceptance of the right cosmic conception, that is to say, with not simply the mental acquiescence in the theory, but also a realizing sense in each individual of the actual, concrete, presence of the Deity in the Cosmos, the spiritual communion will become the most significant fact in his consciousness. The chief feature of the equipment which it supplies is that novel feature in empirical research, the endeavor to present the data in each case in the form of a reasoned ensemble—a result to be attained through the systematic pursuit of the Something Overlooked. Proceeding in accordance with this logical system, the defender of Faith will demand of its assailant that he include in his philosophizing, the phenomena of the spiritual side of the Cosmos; that, as regards the external evidence, he specify the motor-force behind those movements which the race has so persistently, so almost universally, exhibited, which we designate

as spiritual phenomena, and shall, in the case of the internal spiritual evidence, similarly define the origin of the phenomena, if he concedes the existence of such; and if he denies it, insist that he shall either take the proper measures to rouse into action his innate spiritual faculties, now torpid from disuse, or cease to address any reasoning to those whose conclusions are derived from data concerning which he is not competent to form an opinion. If our reasoning on this subject, as set forth in the course of the proceeding discussion, is sound, the defender of the religious sentiment will be able to show that the empirical theories of that sentiment and of the Cosmos are the only generalizations that can reconcile all the related phenomena, and hence, according to the universally-recognized canons of scientific reasoning, must be held to be true so long as they continue to meet this requirement.

We may spare a trifle of space here to remark on the contrast here presented between the present position of the champion of religion and that which he would occupy under the proposed change. The war would incontinently become aggressive, and as quickly be transferred to the enemy's territory, and—to change the simile—the appeal would be to the ordinary common sense of the ordinary hearer, upon a question respecting which the facts are all with the defender of Faith. This would surely be an improvement on the present condition of things.

As regards the second function, it is plain that if Science supplies adequate material for the successful execution of the first, as above described, its distinguishing feature will be its extreme simplicity. To preach the Gospel of the Spiritual Communion to minds

prepared by a knowledge of the Cosmos, will be as the sowing of sound seed upon a well-tilled soil. Next after the great paramount phenomenon of human experience, to wit. the Spiritual Communion, the most fertile subject of discourse will be the teleological conception of the Cosmos, and the high themes which it suggests. For example, observe the light which it throws upon the profound question of the right place of Dogma in the spiritual life of the individual.

According to the sublime purpose of the Almighty, or ever the foundations of the hills were laid, the mind of man has now at length been led up to those heights from which lies visible the intellectual and spiritual path along which man has toiled from his first point of departure, namely, the first awakening of his consciousness. The first great truth that strikes us from this point of view is this, that, "all the religion of the world is one," * notwithstanding the endless variety of the forms in which it has been revealed. For although the comprehensive view of the subject which the evolution of human knowledge now qualifies us to take, leaves no room for doubt that the ensemble of the related phenomena "exhibits a development which is in the main continuous, from the most elementary to the highest stages,"* yet the most conspicuous feature of these phenomena, taken separately, is the endless variety they exhibit in the degree of the approximation of each revelation to the truth, whether in respect of the nature of the Deity, or of His purposes toward humanity:—in other words, upon the subjects which constitute the chosen field of dogma. Whether we study the records of the past, or

* *History of Religion*, page 424.

look about us upon the existing diversities among different peoples as regards their doctrinal systems, we are impressed, in the one case as in the other, with the differences in the religious conceptions which these separate religious systems present. Now this much is certain, to wit: that these various systems embody as much of error as they severally exhibit of divergence from the truth, which is, ever and always, one and the same. Where, then, lies the responsibility for all this repeated suggestion and canonization of error? With God or with man? To answer this question, we must trace the errors back to their source or sources. This does not seem difficult when we confine ourselves to generalities and adhere strictly to the scientific point of view, regarding everything as mere natural phenomena. The individual is responsible for such error as is due to the failure on his part to avail himself of proffered opportunities of right knowledge, especially through the Spiritual Communion, so far as such failure is the result of features in his character and his environment for the existence of which he is responsible. The responsibility for the rest must be placed upon the Power responsible for so much of the character of the individual and of his environment as are not chargeable to the individual himself. Draw the line where we may,—and of course there will be found no two cases in which it will wholly coincide—there will remain in every case a portion of this error that cannot, under any rational view of man's command of his own character and surroundings, be attributed to him. Take the one example of the consequences of all sorts involved in his coming into the world: an event with which the individual, although so profoundly

interested—even if we confine our attention to this matter of his belief—has nothing whatever to say. Our empirical system leaves us no choice but to accept the inevitable here. The responsibility for this much of the individual's erroneous belief is upon the Designer of the Cosmos: it is an integral, inseparable, essential, part of His plan. So much of His purposes it is given us to fathom, but beyond this we cannot penetrate. We have not the wings for the flight. But this much we know, namely, that this Designer is in very truth that Being whom we know in Spiritual Communion as the Inspirer in our souls of the righteous, the just, the pure,—the good and only the good: the evil never: and we rest in confidence and peace.

Although this effort to penetrate the mysteries of the purposes of the Deity has, as usual, finally resulted in our arrival at an impassible chasm, yet has it been not altogether fruitless; on the contrary, the knowledge gained may be regarded as a reward which indicates the consonance of such endeavors with the cosmic order and constitution of things.

Take note, in the first place, of the clear conceptions which we may now form on the subject of anthropomorphism. We see how it results from the fact that man is to pass through a protracted period of spiritual development, and the circumstance that the Deity proposes to manifest itself to him through the spiritual communion at various stages of this development, and also from the fact that for this communion the prime requisite is Sympathy, and the prime requisite of sympathy is Likeness; we see how, as a consequence of all these conditions, the attainment of the required likeness must be had either by making the

Deity—in the conception of the individual—more man-like, or by making man more God-like. In those cases, then, in which the human party is not of a spiritual elevation sufficient for the requirements of the situation—that is to say, in every case of the communion, to a greater or less degree—the individual's conception of the Deity must be shaped to the extent required by the special conditions of each case. Hence it is plain that we must not regard anthropomorphization as being, *per se*, contrary to spiritual progress, nor deanthropomorphization as necessarily and under all circumstances favorable thereto: that, on the contrary, it is a question of circumstance in each individual case. There is visible, however, a guiding principle in the matter, which is this:—The one constant object and aim in each case is the bringing of each individual into the knowledge of, and habit of recourse to, that intercourse with the Divine Spirit; all else is to be regarded as but means to that end. The conception of the character of the Deity may be but a low one, but if it is that which best harmonizes with the character of the individual in question, it is not to be interfered with: the intercourse may be depended on—that is, at the very core of our whole religious system—to elevate the spiritual ideas of the human party thereto, and he will not fail to alter his conceptions of the Deity correspondingly. That is God's method, plainly to be seen.

But a still more important problem is solved for us by this conception of the purpose animating the Creator of the Cosmos of Humanity. The question of "Salvation through Faith"—not faith in the perfect

ultimate beneficence of that Creator in that creation, but intellectual conviction of the truth of a certain body of doctrine—is put in an altogether new light by the acceptance of the conception that all the different religious systems have a common source, so that those which run counter to that one which the believer holds, are, at least in large measure, the natural product of conditions expressly provided for in the plan of the Cosmos, as was the believer's. This view has two legitimate results. It teaches (1) that all enmity because of a difference in religious faith is distinctly irreligious; and (2) that the believer should regard his faith in whatever may be his own religious system as to be prized only because of its effects in leading him to the spiritual communion. Furthermore, it gives additional force to the lesson already involved in the conception of the purpose of the Cosmos, that, inasmuch as we can have no adequate conception of the place which our present highest spiritual development occupies in the total scheme, we can form no adequate idea of how much of our own conceptions of spiritual matters at large, and of the divine attributes in particular, may be simply symbolical, anthropomorphic.

Dogma there must be, in order to the systematic communication of the spiritual experience of one soul to another, and especially for the transmission of such experience from one generation to another; but dogma will no longer be competent to petrify the soul of religion, while the realizing sense of a Cosmos informed with the Divine Presence maintains in full efficiency the spiritual incitements to the cultivation of the spiritual communion.

It is much the same with Ritual, as regarded from the new point of view. Man's psychological constitution is such as to heighten in him those manifestations of the influence of sympathetic emotion which we perceive in the actions and habits of the other gregarious animals. The contagion of feeling is a marked phenomenon of human experience. This propensity has been exploited, in one fashion or another, throughout the history of human experience, from a very early period. It is a tribe of low intellectual development that has not the custom of assembling its members that they may, in one common body, listen to the appeal which is meant to win them over to some opinion or some course of action. It is plain, too, that the conception of the Divine Presence involved in the realistic consciousness of the Cosmos must give much of additional fervor and spiritual exaltation to the rites and ceremonies already associated in the believer's mind with his highest spiritual experiences in the past. Again, in this case as in that of dogma, they will be no danger of a despiritualizing effect, so long as the worshippers bear in mind—and this should be easy under the altered circumstances—the truth that all formal observance is but a means to an end—to wit., the spiritual communion; and to be respected and practiced no further than as filling this function.

We are now in a position to understand how great is the change which the new point of view impresses on our conceptions respecting the place of dogma and of ritual in religion. We perceive that there is no other particular in which our spiritual life is so profoundly modified, reconstructed. We see that if our

teleological hypothesis is correct, the God to whom both dogma and ritual relate, Himself regards them as of importance only in so far as they serve to bring men to Him. We see that it is by His express provision that they exhibit an endless variety in their most essential features; that—especially as regards dogma—our estimate of the degree of the responsibility of the individual for the conceptions he has adopted, becomes less and less as we penetrate more and more into the facts; and, furthermore, that the degree of culpability which the Deity itself must impute to errors of judgment—to any cause of error not culpable in itself—cannot be a vital one. These are important considerations. They encourage the hope of a more fraternal feeling among different sects, and they impart confidence to the anxious believer who is concerned respecting the unstable character of his own adhesion to his own professedly-accepted body of doctrine. We find many reasons, in fact, for the belief that the slackening of the rigidity of the doctrine of "salvation through faith" (interpreted as signifying a settled conviction of the truth of a certain declaration of the purposes of the Deity) will be of happy import as regards the development of a highly-spiritualized religion. Observe, for example, the influence which it must exert upon two movements, each of which has long been recognized as desirable, and now, from our point of view, assumes a new importance. The first of these is the union of all who recognize any spiritual needs whatever, in one common faith. The implications in this case are so obvious that it is needless to dwell upon them here. The second case is that of the reversion of Christianity to the form in which its founder left it.

This movement has been the subject of aspiration with many of the most earnest and most gifted among those who profess and call themselves Christians, ever since that early period in the history of Christianity when contention first arose among its votaries as to what *was* that form. And now we find this aspiration implied in that latest utterance of systematic Christianity, the *History of Religion*, to which allusion has been already made. The author refers (p 414) to this primitive form as having been described by the founder himself as consisting in spiritual intercourse with God and the conduct toward man which such intercourse implies, and in "hardly anything more."

It will be a grateful task to every spiritually-minded expounder of the message of Christ, to wean his flock,—not from their faith in that body of doctrine with which every spiritual experience of their lives is associated, nor from attachment to those observances which have—perhaps during a long experience—served to call away their minds from worldly things and to kindle the flame of spiritual devotion—but from the habit of permitting these innutritious substitutes for their spiritual food to satisfy their spiritual hunger. An equally-grateful change will be experienced by those, however strenuous in the defence of their faith, who love peace and abhor contention, when they realize that their duty lies in simply leading their flock to the spiritual communion, convinced that, when that is accomplished, all spiritual knowledge requisite for growth in spirituality will be better imparted through the influences of that intercourse than by the most authoritative outgivings of all the Ecumenical Councils that ever declared the essentials of Christian

doctrine, the purposes of God, or the conditions of "salvation."

Not less grateful to the religious instructor—whether of seminaries or of congregations—than the relief from controversial discussion, will be the manner in which the tremendous problem of the Existence of Evil will be eliminated from the field of speculation by its relegation—and with it a like disposal of many minor stones of stumbling—to the court of the spiritual communion. The soul, penetrated to its inmost recesses by a sense of the Divine goodness, will find no source of disquietude in the fact that there are things which its intellectual part have thus far failed to grasp.

But there are certain new truths to be inculcated. When the zealous partizan of the entire body of doctrine which the instructor has been expounding, rejects the new features—especially the doctrine of the positive reality of the Divine Presence in the Cosmos and the consequent elevation of the Spiritual Communion to the position of paramount importance assigned to it—when he rejects these as novelties proposed as amendments to Christianity and improvements on Divine Revelation, it will be necessary to remind him of two things, as follows:—(1) that if he will recall the shape in which Christ left Christianity, he will perceive that the "new" view of the spiritual intercourse between Deity and Humanity is old, and (2) that all that is now asked of him is that he shall seek to draw nearer to God, abandoning nothing in doctrine or observance, save when it becomes a hindrance to him in that effort. There will of course be less trouble with the recalcitrant who has heretofore found a stumbling-block in the way of the formal enrollment of himself as a believer,

because of his objections to the formulated creeds and sacrosanct rites which have become essential parts, in one shape or another, in the various systems of modern Christianity. The removal of the repellent features from the spiritual food offered him, must create an appetite for it, and the sense of spiritual need thus naturally developed should prove to be permanent and rich in good results, seeing that it has its foundation in his psychic constitution. The despair of the zealous propagandist is the indifferentist,—the man without spiritual needs, who considers himself fortunate in that circumstance. The specific remedy for *his* disorder is the Cosmos of the Empirical Philosophy as it will appear when it can be presented as the accepted conclusion of modern science, the matter-of-course of every well-informed man or woman; so that it shall “appear to him less as an idea than a fact which must be reckoned with to its full extent, as other common facts of life must, and from which there is no appeal.”* If the complete realizing sense of this can be brought about—as we have a right to expect that it will be if our previous statement is correct as to the natural forces in the human psychic constitution which make for such a result—the spiritual communion, with all its implications, must follow, as the light the day.

The chief concern of every religious instructor should relate to that large portion, even of the most advanced of modern societies, whose waking hours are so largely taken up by the labors and anxieties imposed upon them by their material wants that they have little time or attention to devote to spiritual needs. In this

* “*History of Religion*,” p. 157: where, however, the passage is used in connexion with a different subject.

case it is obvious that the most urgent requirement is simplicity in the religious system set before them. Now,—as we have already had occasion to remark—this is the distinguishing feature of the religion which the empirical philosophy expounds. Reference has already been made to the fact that the religious sentiment may exist in great strength and purity in those whose intellectual development has not been carried beyond the average prevailing among the masses of the population of the most advanced modern nations. It is in that body, in fact, that we shall find, quite as much as in any other, that experience of the spiritual communion to which our empirical theory of the religious sentiment would attribute all that is essentially religious in any religious system. To give to this experience a more positive, concrete, aspect in those who have it, and to extend it to those who have it not, the course prescribed by empirical science is clear. The single central concept of the empirical Cosmos, to wit., the Divine Presence therein, and the simple means of access thereto, constitute the entire body of doctrine called for in the case.

Surely, there is something soul-stirring in the thought,—May it not be so, that our race is to see the return to the earth of that all-too-brief spiritual experience when the simple message from the lips of the obscure carpenter of despised Nazareth — the Fatherhood of God, Brotherhood among Men — like some magic spell, had power to cause the plodding toiler to forget all else in the irresistible, absorbing, impulse to follow the messenger and hang upon his words; and when this glad evangel, like a torch passed from hand to hand, spread through the vast domains of a world-

conquering empire:—a spiritual force, in the presence of which potentates and powers stood helpless? May it not be that, after all these centuries of spiritual decadence,—the loss of the spiritual significance of the message in the accumulated mass of creed and ceremonial in the Church, of ignorance and sordid animalism in the people; of ultimate re-awakening of the intellect, and its devotion to a search for a universe without a creator;—may it not be that from out this aggregation of varied experiences, these wide explorings, a deeper insight has been evolved, simply intellectual in itself, but destined to bring back humanity to the simplicity in doctrine, the fervor in feeling, of that auspicious beginning? That will indeed be a day of promise when the disheartened toiler, worn with the cares and hardships of his narrow earthly lot, moved by the simple story of the Divine Presence, of the loving invitation, accepts the gracious call and finds the promise true, and going forth in the joy of a new found existence, meets a companion of his toil and announces to him, as of old Andrew to Simon Peter, and Philip to Nathaniel—“I have found the Lord! Come and see!”

This reference to the earliest period of Christianity suggests something which demands our attention. What we are seeking, just now, is the means whereby to restore the fervor of the religious sentiment which distinguished that period. What, then, was the secret of that sudden but lasting awakening that converted the unintellectual, unspiritual workingman into the enthusiasm holding all that he had ever prized or striven for as worthless in comparison with the precious gift of the new thought that burned within him? It was not the miracles, for the impulse continued to spread after the

last of the apostles had passed away. It was the Power of the Word: it was the stirring nature of the message that was carried from soul to soul, to the weary and the heavy-laden, to the despised and the oppressed. The Fatherhood of God, Brotherhood among men! These were the glad tidings, powerful, not in their purport only, but in their novelty. Never before had man spoken as this humble Nazarene: surely, this is a message from on high. And the latent spiritual nature, roused into full activity, became the paramount force in these, until then, common-place lives, filling them with joy and peace under every form of hardship and suffering, deliberately incurred that their fellow-men might share with them the riches of their spiritual experience. Why, then, after winning the pagan world, has this mighty force declined: why, instead of enthusiasm, do we find indifference; instead of faith unbounded, all-compelling, a deadening of the spiritual emotions, the manifestations of which everywhere fill the thoughtful with alarm lest the civilization which has so confidently vaunted itself is to rot itself out in a swinish materialism, or be shattered into ruin by an explosion generated by unwholesome internal ferments?

History supplies the answer. The conception of the intimacy of intercourse with the Deity is supplanted by the insidious growth and final perfection of a system which fixes a great gulf between Divinity and Humanity; Christianity, now transformed into an ecclesiastical organization, constituting the bridge which alone can span the space. The brotherhood of man becomes a form of meaningless expression in the face of the fact that the Church is in league with the oppressors. Time passes, and the religious sentiment is deadened more

and more by dogma and ritual until it becomes, with rare exceptions, the superstition of the ignorant. Then ensues a reaction. Dogma and ritual and the authority of the Church are repudiated, and a new spiritual awakening shows that the religious sentiment, long drugged and drowsing, is still alive and capable of moving men as in the earlier days; but the influence of habit is strong, and the necessity of *some* elaborate body of doctrine, of *some* paramount and unquestionable, *some* sacrosanct and divinely appointed, authority is assumed as a thing of course. The requisite qualifications for this exalted office are imputed to the Canonical Scriptures, and upon this basis a new start is made. But how fares the original message under the new conditions? The Fatherhood of God—how is it with it? The necessary implication of the doctrine of the perfection of the sacred oracle is the equal authority of any one part with any other. Hence the conceptions of the Deity belonging to a very primitive period in man's spiritual development, presented in the divine record, were to be received with the same unquestioning faith as those involved in the message of the founder of Christianity. The consequence was inevitable. The God of Calvinism and of Puritanism could not be the loving, long suffering Father of the Nazarene's message, seeking the love and confidence of his human children. The Brotherhood of Men—here a better state of things prevailed. In the Protestant congregation, all were equal before the Lord. We need not enlarge on this subject here. The intelligent reader will recognize the results cropping out here and there throughout all the subsequent history of the civilization of the West. In fact, this leads up to a rather singular feature of the

manifestations of the prevailing character of modern religious sentiment. It is plain that one reason why the original message of Christ now falls so largely upon dull and inattentive ears is the fact that, in theory, the brotherhood of men has become a sort of matter-of-course commonplace, so that the mere abstract statement of the proposition can not possibly exercise the influence which it exerted when it came as a sudden and amazing revelation. After all that has already been said on the subject, a brief reference should suffice here respecting the manner in which an imperfectly-developed science reinforced the evil influences of dogma and ritual, upon the Christian evangel. Both the Roman Catholic and the Protestant forms of Christianity represented its most fundamental truths—in fact, the entire system—as dependent on the authenticity of the miracles and the plenary inspiration of the scriptures. These were the special objects of the attacks of science, its damaging revelations being eagerly seized upon by those who were anxious to find a justification for their repugnance against believing in the fatherhood of the God revealed in certain of the books of the Hebrew Scriptures. Superadded to these was the influence of that scientific conception of the Cosmos which placed the Great Unseen Power of which it is a manifestation, at an elevation so exalted, a distance so remote, as to drown the conception of intimate intercourse in an ocean of mystery and awe.

From these data we should be able to form a reasonably-accurate conception of the difference between the present conditions and those which prevailed when the message of Christ was like fire to tow, in the hearts of those prepared for its reception. We see that

one feature of that message—love toward our fellow-men—has lost its significance as a revelation; and the other—the love toward God—has, to a large extent at least, come to be looked upon by the believer in the light of a requirement which is adequately complied with when his mind has been kept free from misgivings respecting the body of doctrine which he professes, and the observances which his system of religion enjoins have been punctually and reverently complied with.

How, then, with such conditions prevailing, shall we rekindle the ancient flame? We have two classes to deal with, to wit., the believers and the non-believers. In both, our dependence is on the realizing sense of the actuality of the Divine Presence in the Cosmos. With this will come the Spiritual Communion; and with that communion, everything. In the case of the non-believer, the present stumbling-blocks will be removed by treating the objectionable dogmas and rituals as anthropomorphic symbols which, through the operation of the psychological principle of the Association of Ideas, are useful to some as instrumentalities; in the case of the believer, he is to be asked simply to seek a closer intercourse with that Being whose message of invitation he professes to accept as really emanating from Him. He is asked to resign nothing but his indifference, to adopt nothing new except a more practical faith in the sincerity of the Divine promises, and the knowledge of the Divine purposes now brought by Science, in accordance with those purposes, within his intellectual grasp in the scientific Theory of the Cosmos. It is not even demanded of him that he abandon those articles of

his faith which would impute to the Deity qualities or acts which he would call unworthy in a fellow-man. He is left free to hold fast to everything which makes for the spiritual intercourse : to reject, according to his own experience, whatever makes against it. As we have said before, it is of the very essence of our theory of the Spiritual Communion that, as the source of all spiritual knowledge, it can be depended upon to correct, better than could be hoped for in any other way, everything inconsistent with itself.

This would seem to be a promising programme : but a formidable obstacle already alluded to above comes into view. That system which stands first among the forms of Christianity as regards both the number and the loyalty of its adherents, makes the basis of its very existence to be the fact of the impossibility of the direct communion of the soul of the believer with the Deity. Furthermore, it asserts, as its paramount quality, its absolute unchangeability. But a further inquiry into the related facts tends to modify the discouragement which these circumstances must otherwise create. Let us briefly consider some of these.

In the first place, it is obvious that the Church's declaration of the inflexibility of its doctrine must be interpreted in the light of the fact of the existence of Ecumenical Councils, and consequently the declaration understood as subject to qualification. Without stopping to so much as indicate any among the many conspicuous contrasts presented by the attitude of the Church on important questions at different epochs and in different communities, we select the single instance of the Church in America, where its policy in recent

years makes it manifest that it has come to fully comprehend the truth that when the flock, intent upon new pastures, quits the arid plain to seek the dewy heights, the shepherd must mount with it, or cease to be its shepherd. Another truth, already sufficiently manifest to thoughtful observers outside of the organization, must soon force itself upon men as accomplished in worldly wisdom as those who direct its policy, namely, the analogy of the position of the Church proclaiming its own immutability, and that of the uncompromising defender of the doctrine of the plenary inspiration of the Scriptures. The claim places a responsibility on the defended institution, under which it must inevitably break down. The Church has a past, which, in the light which prevails in the present period of mercilessly-searching investigation and of high standards in respect of justice and humanity, is already fast becoming embarrassingly rich in matters requiring explanation, and it must be constantly more and more borne in upon it that the continued proclamation of that immutability must render that embarrassment more and more serious, until it reaches alarming proportions. Thus there are forces already in course of development which must eventually compel the suppression of the position of inflexibility, leaving the way open for the modification of the Church's position respecting its interposition in the Spiritual Communion.

Coming now to the latter, there are recent evidences of such modification, which, though limited in number, are weighty in significance. When called upon to deal with a high order of intelligence—as, for example, when minds long familiar with the contending dogmas

of waning faiths and discordant pseudo-sciences, suddenly stricken with the anguish of a heart-breaking bereavement, have turned away in despair from the impotent systems which had entertained their curiosity in calmer hours, and have cast themselves upon the bosom of Faith as embodied in the Church, finding in its serene assertion of divine inspiration the strength that they had vainly sought for in themselves under the crushing weight of their affliction,—when it has been a question of dealing with such as these, the fine intelligence of the modern Church has recognized the necessity of bringing to bear the soothing influences of the direct spiritual communion, and has become the tender and sympathetic guide, to lead the bruised spirit into the presence of the Divine Healer. It would appear, therefore, that this vast and potent organization is not ill-prepared for the change of attitude requisite for its transformation into an instrumentality for the promulgation of the New Gospel of the Divine Intercourse.

It would, however, be the height of injustice, were we to found our expectations of such a change simply upon the worldly wisdom of the Church of Rome. Without undertaking to discuss the question of the extent to which, in other times, the principle that the end justifies the means, and the assumption that whatever tended to promote the interests of the Church must necessarily work *ad majorem gloriam Dei*, were influential in the framing of its policy, and having reference exclusively to modern conditions, the candid observer must give to its controlling spirits of the present day credit for a piety so sincere and effective that it will require no stimulus from any less exalted

motives to insure the co-operation of the Church, when the power of the New Gospel of the Divine Presence has been convincingly demonstrated outside of its sphere of influence. If that power is in reality what our empirical philosophy would have it to be, these conditions will be supplied, and the time will come when the colossal structure which stands, august and grand in its steadfastness against external assault, shall, through irresistible influences operating silently within, give a cheerful and assenting echo to the voice of the shade of Galileo, calling from the chambers of the Inquisition, "*E pur—si muove!*"

Let us now turn our attention to the long-deferred question of the points of difference between the Empirical and the Synthetic* systems, as regards the bearing of each, severally, upon our present line of inquiry.

Before entering upon this, however, the author of the present treatise desires emphatically to disclaim any intention of criticizing the great achievement of Mr. Spencer, in its own chosen department of thought. He is fully aware that such an undertaking on his part would be an act of presumption. But† the points of view in the several cases are so wide apart, and the

* This work being addressed, at least primarily, to scholars, it is assumed that the reader is sufficiently familiar with the works of Mr. Herbert Spencer to understand the references thereto which occur in this place. Where this is not the case, the reader is recommended to consult Mr. John Fiske's "Outlines of Cosmic Philosophy" (Boston: Houghton, Mifflin & Co., 1894), which admirable exposition of that feature of Mr. Spencer's system which concerns us in the present instance, will be found better adapted to the purposes of those unfamiliar with the original than the original itself.

† As more fully explained elsewhere (see p. 135 *infra*).

limits of their respective horizons consequently so far from coincident, that it may well happen that a certain phenomenon or group of phenomena may be in plain sight as respects one observer while scarcely, if at all, within the range of the other's vision. It is to be understood, therefore, that when the term "overlooked" is employed hereinafter, in conformity with the usage described in the body of the present work (see p. 146 *infra*), it conveys no imputation upon the powers or the carefulness of the observer in the case; importing nothing further in any event, in fact, than that the thing in question was not observed; and, in the present instance, that it was not properly within the range of observation.

With these explanations, we proceed to take up the inquiry indicated. Let us begin with the question, What is the conception of the Empirical System respecting its own relation to the Religious Sentiment? The answer may be stated thus:*

The subject of inquiry is this:—What can Science do toward satisfying a certain spiritual want, namely, the development of the religious sentiment to a higher efficiency as a motor-force in human Character? Human experience has shown that such development is secured through the intercourse of the human soul with the Deity. (Not with Deity, an abstraction; but

* It is hoped that the reader will appreciate the reason for the frequent omission of reference to the fact that a repetition is employed. In a discussion of this nature, in which it is necessary to exhibit the same concept in different aspects and different connexions, the customary reminder that the subject has been touched upon previously would itself become the most annoying of the repetitions.

with The Deity—a Tangible Reality.) The basis for this intercourse is found in the fact of the Divine Love, which seeks to bring the spiritual part of man into such intimate personal relations,—soul communing with soul—that the soul of man may be constantly developed, more and more, into a likeness to the divine nature, which shall qualify it for a nearer and nearer intercourse. Human experience of this spiritual communion proves the existence of this prime requisite. The Divine Love is ever stretching out its arms in invitation. The second requisite is the response of the human soul. The basis of such response is confidence in this loving kindness—confidence, and the love which it inspires. The indispensable condition of such confidence is Knowledge: knowledge, first, of the existence of this beckoning Spirit, and, second, of its nature and qualities. Now, Science having, through a study of the phenomena of the satisfaction of the material and spiritual wants of humanity, ascertained the nature and limitations of human knowledge, has become possessed of such knowledge of the Cosmos as enables it to present to the human intellect conclusive proofs of the Divine Presence as an integral, inseparable, constant, and actual, constituent of man's terrestrial environment. This phenomenon of external nature, supplemented by a certain other phenomenon of internal experience—to wit., the satisfaction of the spiritual needs through the spiritual communion—being set forth in comprehensible terms, nothing remains for Science to do, except to supply the prescripts of practical action, whereby this soul-to-soul intercourse can be secured. This requirement offers no difficulties to the Science of Experience. Referring

the question to the abounding spiritual experience of humanity, the response is prompt:—"Open the heart to the Divine Spirit, and it will enter: open the ear of the soul to the divine call, and that call will be heard." Such is the response of the Empirical Philosophy to the question, What can Science do?

Next in order comes the question, what is the conception of the Synthetic System respecting *its* relation to the Religious Sentiment? The intelligent reader will recognize the difficulty of conveying in a few lines, even the barest and most meagre presentation of so comprehensive a subject, and hence, it is hoped, will regard with tolerant sympathy the efforts which have resulted in the following answer:

In the first place, the Synthetic Philosophy does not concern itself with that which is the problem of problems to the Empirical System, to wit., the development to a higher efficiency, of the religious sentiment obtaining in the present civilization of the Occident. What does concern it is, to show that, notwithstanding the fact that the Evolutionary Philosophy which it expounds is bound to change the language—in any case merely symbolical—in which religious truths will be expressed, there will be no change wrought in the essence of the religious conceptions now prevailing.*

* "It is not proposed to institute a new religion. The aim is simply to point out some of the more important modifications which current religious doctrines seem destined to undergo in becoming accepted and assimilated by thinkers whose theories of things are based wholly upon irrefragable scientific truths. That the Doctrine of Evolution, which is now the possession of a few disciplined minds, will eventually become the common property of the whole civilized portion of the human race, is, to

We see, therefore, that the aims of the Synthetic Philosophy have no further reference to the development of the religious sentiment than is involved in its general purpose to systematize human knowledge. In consequence, it views with equanimity the fact that "to all minds save those sufficiently instructed in science, its doctrines are likely to seem shadowy and over-subtle :" and that "the less anthropomorphic the symbol by which Deity is represented, the less readily imaginable it is as something which can be seen, or heard, or prayed to, the less existent does it appear." To the objection that "an infinite and unknowable God is practically equivalent to no God at all," it answers that "the symbolization of Deity indicated by the profoundest scientific analysis of to-day is as practically real as the symbolization which has resulted from the attempts of antiquity to perform such an analysis, and is in every way more satisfactory alike to head and heart," and since it is absolutely certain that the less anthropomorphic views will never become prevalent until the scientific philosophy on which they are based has become generally understood and accepted, no practical harm can come of the merely abstract truth that if those views were accepted by those incapable of understanding their scientific basis, it would tend to the subversion of their religious faith.*

* *Outlines of Cosmic Philosophy*, pp. 469-471.

say the least, very highly probable. In view of this probability, it seems a worthy end for our philosophical inquiry, if we can ascertain that, in spite of the total change in the symbols by which religious faith finds its expression, nevertheless the religious attitude of mankind will remain, in all essential respects, unchanged." *Outlines of Cosmic Philosophy*, Vol. II., p. 471.

Thus the Synthetic Philosophy, entertaining no purposes relating to the religious sentiment of the masses of to-day, pushes its deanthropomorphization to the furthest limits possible. Again, this philosophy, aiming at the discovery of abstract truths, invades the domain of the concrete no farther than to assure itself of the correspondence between the data of its reasoning and the actual order and constitution of things. It is in this way that it comes about that, although it takes cognizance of the fact that our knowledge of the Realm of Objective Existence is already so complete as to enable us to satisfy a wide range of our wants, material and spiritual,* yet so slightly is its attention attracted

* "Since the ultimate function of philosophy is to be the intellectual guide of our lives,—since our ultimate aim in ascertaining the relations of coexistence and sequence among phenomena is to shape our actions, physical, mental and moral, in accordance with these relations, it follows that the philosophy whose character and scope I have indicated, is sufficient for our highest needs." *Outlines of Cosmic Philosophy*, Vol. I., page 96.

"It is enough to remind the reader that Deity is unknowable just in so far as it is not manifested to consciousness through the phenomenal world,—knowable just in so far as it is manifested; unknowable in so far as it is infinite and absolute, —knowable in the order of its phenomenal manifestations; knowable, in a symbolic way, as the Power which is disclosed in every throb of the mighty rythmic life of the universe; knowable as the eternal Source of a Moral Law which is implicated with each action of our lives, and in obedience to which lies our only guaranty of the happiness which is incorruptible, and which neither inevitable misfortune nor obloquy can take away. Thus, though we may not by searching find out God, though we may not compass infinitude or attain to absolute knowledge, *we may at least know all that it concerns us to know, as intelligent and responsible beings.* *Idem*, Vol. II., page 470.

by this (to the Empirical system, all-important) fact, that it persists in classifying the entire realm of objective existence as "Unknowable."*

Having now inquired as to the conceptions entertained by each of the two systems, the Empirical and the Synthetic, respectively, concerning its own relation to the religious sentiment, let us now put the same question as to the conceptions of the Empirical system respecting the relation of the Synthetic system to that sentiment. In the first place, then, it is plain that, in view of the position of the Synthetic Philosophy respecting the existing status and future prospects of the religious sentiment, its apparent optimistic indifference to the state of Christianity,—the really-fervid adherents thereof insisting on making a life-or-death league between it and an outworn science and a belated theory of inspiration, both of which must melt away before the light of knowledge as winter's snows before the summer's sun; the bulk of the believers contenting themselves with an attitude of half-indulgent assent to doctrine and observance; the numbers of the non-believers constantly on the increase (recruited, alas, from the ranks of the most thoughtful, earnest, and broad-minded): in view also of its exclusive devotion to the perfecting of human knowledge to the limits of human capacity, and the consequent removal of the Deity to the realms of the Unknowable:—in view of all these things, it seems inevitable that the Empirical Philosophy must look upon its Synthetic correlate as

* "The proper attitude of the mind, when face to face with the Unknown Reality, is therefore, not a speculative, but an emotional attitude. It belongs, . . . not to Philosophy, but to Religion. *Idem*, Vol. I., p. 96.

a hindrance and an obstacle in the way of its purposes to re-vitalize the religious sentiment through the agency of the Spiritual Communion. Again, the Empiricist must regard as ill-taken the Synthetic position that its deanthropomorphizing teaching will influence none but those whose intellectual development is already such that its symbolic representation of the Deity will attract, rather than repel them. He will contend that, on the contrary, a special feature of the period is the large and rapidly-increasing numbers of those who, without the intellectual training to enable them to follow out the reasoning by which certain scientific conclusions are reached, adopt them with a confidence all the more positive because of their unfitness to pronounce an opinion respecting them. From the empirical point of view, the existence of so important an element in each modern civilized community is a fact which must not be ignored.

But it is needless to go on accumulating material of this sort. We have enough already to put the Empiricist in a perplexing position. Here is the Synthetic Philosophy, reaching the high-water-mark of existing human intelligence:—is the Empirical system to fall back into the old familiar rut, proclaiming once more the old warfare between Belief and Knowledge, between Religion and Science? Otherwise stated, must we, while conceding—as we must—the claims of the Synthetic system to have correctly expounded the Theory of the Cosmos, so far as concerns its transcendant grandeur, its infinite stretch beyond the limitations of human thought, its infinite variety of aspects in which humanity has no part, and the equally-unknowable attributes of the Power behind the Cosmos, at the same

time declare that this is not a contribution from Science to Religion, in compensation for past injuries, but, on the contrary, a new instance of the harm which it inflicts by removing the Deity too far off for human communion therewith? But the solution is not far to seek. The reconciliation is to be found in the qualification of the teachings of the Synthetic Philosophy by giving equal heed to the irrefragable, inexpugnable, facts revealed by the Empirical method of research, to wit., man's spiritual experience in connexion with the Spiritual Communion. With the soul saturated with the consciousness of these, there is no danger of its being repelled by awe or discouraged by mystery. Perfect love will cast out fear.

Here at last we begin to attain a point of view from which to recognize somewhat, at once of the reasonableness and of the value of the hypothesis of the Macrocosmos. In order that the empirical theory may be consistently carried out in practice—in order, that is to say, that we may confine our attention to the knowledge which can be made useful to us in our pursuit of sound working hypotheses—we must first have disposed satisfactorily of every phenomenon that has any claim to relationship with the matter in hand. "Residual" phenomena are an abomination in the sight of the Empirical Philosophy, save when they appear as detectives, directing us to the hiding-place of a Something Overlooked. It is on this principle that the hypothesis of the macrocosm seems to give a firmer mental grasp of the hypothesis of the microcosm, which in turn explains so completely the phenomena of the spiritual communion, by reason of its teleological explanation of the Cosmos of Humanity.

The hypothesis of the macrocosm, assembling and co-ordinating in one generalization, all the phenomena which suggest to the seeker after the spiritual communion, discouraging considerations, leaves free play for that process of anthropomorphization which we find to be an indispensable prerequisite of the trustful acceptance, on the part of the human soul, of the Divine invitation.

In the light thus cast by the empirical theory of the Cosmos on the mutual relations of the two systems, there would appear to be no difficulty in effecting a complete reconciliation between them. The empiricist must see that the Synthetic Philosophy is not to be criticised for not doing that which it did not undertake. What it did undertake, and has grandly accomplished, was this, namely, to ascertain the limitations of the human mind in dealing with the question, What can man know of the Cosmos? Describing the facts of the case in the terms of the empirical cosmic theory, its undertaking, *ex vi termini*, directed its investigations upon the Macrocosmos; and while, from the empirical point of view, the necessary implication of this fact, to wit., the constant tendency to a farther and farther deanthropomorphization of the conception of Deity, must, taken by itself, militate against the anthropomorphization of The Deity requisite for the spiritual communion, even that difficulty is removed by supplementing the conclusions of the Synthetic with those of the Empirical System. Not only are the effects of the remoteness and intangibility of Deity in the macrocosm lost sight of in the ever-increasing distinctness of the impression of the presence and influence of The Deity of the microcosm

received through the spiritual communion, but, as already indicated above, the awe-inspiring phenomena of the macrocosm are, through the synthetic doctrines, made so manifestly unapproachable as to enable the empirical believer with a clear conscience to set them aside as things which, being plainly not within the range of human cognition, should not be allowed to distract the believer's mind from the pursuit of that attainable knowledge which *is* serviceable to his material and spiritual wants.

This generalization brings all into correlated order; exhibiting the Synthetic and Empirical Systems as separate, but correlated, enterprises in the pursuit of knowledge. The Synthetic Philosophy, as regards its main structure, is a completed edifice; nothing remaining to be done but to add such subordinate details as come to light from time to time in historical or physical inquiry. In respect of its relation to the Empirical Philosophy, its most conspicuous services, as already indicated, are to be found in the demonstration, (1) of the existence of Deity as the great central and controlling fact of the macrocosm, and the teleological connexion between the two; and (2) the limitations of the human psychic constitution; thus defining the line of separation between the Knowable and the Unknowable. The Empirical Philosophy, as regards its main structure, may also, since the demonstration of the fact of the Divine Presence in the microcosm, and the practical prescript of recourse to the Spiritual Communion implicated in that fact, be regarded as a completed edifice; all that remains being the systematic and continued prosecution of Physical Science for the satisfaction of a wider and

wider range of the material wants of humanity, and the unintermitting cultivation of a more and more intimate spiritual communion, in order to meet a higher and higher order of its spiritual needs. As regards its relation to the Synthetic Philosophy, its chief service, as we have seen, consists in the clearer and more concrete conception which it supplies, of the extent and accuracy of our knowledge of the universe, both material and spiritual, obtained through the evidence derived from the manner in which that knowledge enables us to satisfy our wants.

While the two systems are one in the pursuit of knowledge, each has its own particular functions. The Synthetic pertains to the higher realm of abstract speculation: the Empirical to the lower sphere of concrete action. The Synthetic will pursue its study of the macrocosm, the Empirical its study of the microcosm; new illustrations in confirmation of its grand evolutionary generalizations giving interest to the Synthetic, new insight into cosmic law and the ways of the Divine Friend of Man rewarding the devotee of physical science and the trusting believer, happily united, at last, in one and the same personality.

Thus will this latest, crowning, gift of Science to Religion close the long and discouraging spiritual experience of humanity, namely, of the religious sentiment, each time declining from the fervid enthusiasm and compelling power of the days of its simplicity, into dogmatic assurance, spiritless formalism, pseudo-scientific skepticism, or worldly indifference.

So comprehensive and at the same time far-reaching are the conclusions reached by the Synthetic system, that when we are done with its relations with the

Empirical, it becomes plain that we have sufficiently elucidated the nature and scope of the latter, and hence that a concluding summary for that purpose would be mere surplusage. Instead thereof it may be well to utilize a suggestion from a recent incident.

A distinguished British statesman, already well seen in the world of letters, having published a work upon *The Foundations of Belief*, it occurred to one among his many critics to moot the question whether that which he had so ably and so earnestly set forth in his treatise, actually represented his own real mental attitude:—whether, in short, he himself believed in his own foundations! The question—whatever else may be said of it—is so eminently empirical that it suggests to the prosecutor of the empirical method the practice of applying it—as a sort of verification-process—at the close of each labored investigation. It seems to furnish a valuable test of the latent existence of an unconscious insincerity. For, manifestly, it is not impossible that the would-be candid inquirer, unwittingly swayed by his zeal and deceived by the apparent symmetry of his reasoning, may be led on to imagine to be his own, conclusions which, as a matter of every-day, common-sense, fact, do not habitually control his own thoughts and actions. At all events, let us make trial of it here.

The Self, self-questioned, answers thus:—“The Theory of the Cosmos set forth above, is simply a working hypothesis provisionally adopted, according to empirical methods, as a generalization which seems to co-ordinate all the observed related phenomena into one systematic whole, and hence held to be positive so long as experience presents nothing inconsistent

therewith: but the Divine Presence and the Spiritual Communion are FACTS, to doubt which would be as irrational as to doubt one's own existence—the evidence being identically the same in both cases: that,—to repeat once more a borrowed expression—they are facts which must be reckoned with to their full extent as other common facts of life must, and from which there is no escape."

FIRST DEPARTMENT.

THEORY.

BOOK FIRST.

Theory of Logical Method.

The extent to which the Logical Method employed in the present work has already been exhibited in practice in the preceding Introduction, should make it a comparatively simple task to explain its Theory. At the same time there are certain features of the latter which it will be well to have clearly understood before entering on the investigations whose mode of logical procedure it is its function to systematize.

The object of this treatise is the exposition of a certain hypothesis intended to be contributory to the construction of a Concrete Science of Human Progress. It starts out with the following assumptions, all of which, with a single exception, it regards as ultimate facts, so far as concerns the purposes of the present inquiry. These are: (1) that we have, in the phenomena of man's terrestrial experience, conclusive proof of the existence of a principle of progress in the race; (2) that it is within the power of human effort to modify this progressive movement; (3) that a science which should prescribe the rules whereby to regulate

those efforts in accordance with natural law would be a desirable acquisition ; and (4) that no such science has as yet been created. This last proposition we recognise as one of which—though included here among the data of our reasoning—we are bound to establish the correctness. This we propose to do, (1) by the considerations now to be presented, and (2) by the facts which will be developed in the course of our inquiry, further along.

The classic Political Economy,* by virtue of its

* It will be well to explain at the outset the reason for referring in this work to the generally-accepted Political Economy as “ the classic;” that term being already in common use to designate the more rigid older school of economists in contradistinction to the more elastic later, or “ Historical,” school. The explanation is to be found in the fact that our criticisms will, for the most part, be directed against those leading doctrines which are, in essence, the common property of both schools; the divergence of the newer system relating more to questions of the application of these abstract principles to practical economic problems than to questions of their intrinsic soundness. As a rule, it will be found that, in respect of the points upon which we suggest objections to the commonly-received doctrine, the Historical School is as classic as its more uncompromising sister.

Another reason for our employment of the term, is the entry upon the scene, of the New Economics, originating in Austria but now rapidly securing the adhesion of eminent economists elsewhere, especially in the United States. With this new departure in *à priori* economic science we have no antagonism such as is the inevitable result of the contrariety in method and in results as between our system and that of the classic Political Economy. On the contrary, were it within the scope of our little work, it would be interesting to point out the correspondence which could be shown, as between the conclusions arrived at under our empirical method and those of the

authoritative position among the sciences, and of its bearing on the question of providing a physical basis for progress, must be recognized as the nearest approach to a science of human progress that the present state of sociological research presents. From our empirical point of view, we judge it by its fruits. What, then, has it contributed toward the systematization of human effort for the furthering of the forward movement? As regards the vital problem of Poverty, it proclaims a Gospel of Helplessness. So far as the production of wealth is concerned, man is the mere puppet of natural law, its born thrall and bond-slave. Every attempt at modifying the natural drift of things is mere mischievous intermeddling. *Laissez faire!* Respecting the future of the Labor Class, it preaches a Gospel of Hopelessness. It knows of but two methods of "escape from a harsh and hopeless destiny," to wit., (1) the restriction of the increase in that class, and (2) co-operative production (Cairnes). In other words, one resource is the exercise of prudential self-restraint on the part of the class whose social position shows their incapacity for either prudence or self-denial of any sort, and the other is based on the expectation that, in commercial competition, the ill-managed will kill off the well-managed industrial enterprises. Upon the ques-

new economic school, especially on such fundamental questions as those of "Surplus," "Utility," and the like. It seems not unreasonable to anticipate that, in the fullness of time, the Abstract Science of Economics, having superseded Political Economy, shall, in alliance with the Concrete Science of Progress so far as the latter is concerned with economic problems, constitute a pair of correlated and mutually-adjuvant systems.

tion of the relations between Capital and Labor, it supplies the materials for a Gospel of Hate. It teaches (1) the doctrine of an antagonism of interest between the two, based on a natural law as immutable, as inevitable, as any other in the order and constitution of things; and (2) a theory of the genesis of wealth which leads up logically and irresistibly to the conclusion that the cause of poverty is to be found in the robbery of the working-man by his employer. The legitimate consequences of such instruction are sufficiently illustrated by the perils which to-day environ the most advanced among the modern nations. Legitimately derived therefrom is a school of social science advocating a new political and industrial arrangement, based on the abandonment of the institutions through whose instrumentality man has been developed from savagery to so much of civilization as he has attained. With equal logical warrant from its teachings, a small but most earnest portion of that class in modern society which should constitute a *corps d'élite* of pioneers in progress, the inculcators and exemplars of the spirit of universal brotherhood, has been converted into the messengers of evil tidings, the apologists of lawlessness, the express bearers of false witness.

It is plain, then, that a Science of Human Progress, whether abstract or concrete, remains to be created. Furthermore, when we consider the intellectual eminence of the great originators and expositors of the classic Political Economy, it becomes equally plain that its failure can not be attributed to any lack of ability on the part of its framers; that, on the contrary, we have no reason to hope that any greater mental power will be brought to bear upon the study

at any future time. If future success is to be looked for, it must be through the employment of a better logical method. This suggestion not only inspires hope, but supplies a reasonable justification of our hardihood in attempting that in which others of so high an order of mental equipment have so completely failed. A change of system; a change in the point of view—these may mean much. We should not refrain from straining our vision from a newly-gained summit, in exploration of a vista that has hitherto lain below the horizon of others, no matter how much keener of sight they may have been. We should not despair beforehand of felling, with sharpened axe of tempered steel, the oak that resisted the dull wedge of flint, though wielded by a giant. The next question for us, therefore, is that of the system according to which our researches are to be prosecuted.

We shall not undertake to justify in advance, and *a priori*, the method to be employed in the present instance. Everything put forward, no matter whether in the form of a conjecture or of a positive statement, is to be understood and taken as hypothetical, and hence meant to find its ultimate confirmation or invalidation in the degree of its coincidence with the system at large, which is to be developed in the course of our investigations.

We propose for the logical method which we thus put on trial the title of "Empirical," because under it we are to keep in the closest possible touch with Experience. The data from which we reason must stand the test of comparison with the phenomena of real life, and the conclusions reached must be similarly verified. We are, of course, frequently confronted by

the same difficulty which perplexes every investigator in the realm of the concrete, under every method, to wit., the endless number and the bewildering complexity of the phenomena, and, in such cases, we can look for no useful results from mere blind groping among unsystematized facts, however well-authenticated they may be. We therefore have recourse to metaphysical methods, so far as to frame hypothetical and conjectural generalizations, which we proceed to verify by a search, as nearly exhaustive as possible, among the related phenomena of human experience, adopting those conclusions only which explain satisfactorily all of these phenomena that come within our cognizance. It has been found necessary to go so largely into this subject already (see Introduction, pp. 11-16, *supra*) as regards the nature of human knowledge and of the proofs accessible to the human mind, that we need add little here in the way of preliminary explanation, especially as the method will be best understood by observing it in practical operation in the succeeding pages. It may, however, be well to call attention, in this place, to one point, as follows:

It will be noted that in the above description of the method to be employed there is nothing that is not already perfectly familiar to everyone acquainted with the (somewhat divergent) theories of the logical method of the classic Political Economy, especially that so elaborately expounded by Cairnes; but, as will be shown presently, it has not been applied to practice by that school, and a consist adherence to the data of experience which, as it is hoped, will be exemplified in the present treatise, will show by contrast how novel is the employment—elsewhere than in the purely

physical sciences—of a method empirical in the sense above defined.

We prefer the term “empirical” to any new designation of the new method of research for abstract principles, notwithstanding the depreciatory associations which past usage has coupled therewith. For surely there can be nothing objectionable, *per se*, in a name which signifies a dependence on Experience; especially as this dependence is the precise feature which distinguishes the method, and hence should be especially indicated in the title given it. In fact, the contemptuous implication in “empiricism,” as employed by the devotees of *à priori* speculation, is but a belated survival of the period when the attempt to *find out* things was regarded as beneath the dignity of true Philosophy, which proposed to *think out* all additions to human knowledge. The natural antithesis to “empirical” is of course “metaphysical”: a designation as offensive to the *à priori* philosophers dealing with problems of concrete action as the unfitness of their method for such application ought to make it in the eyes of all systematic reasoners. It might be suggested that, by way of harmonizing matters, the title “metaphysico-empirical” might be given to the system which—dealing with precepts of action relating to concrete problems—calls in metaphysics no farther than is needed for supplying suggestions for ranging the phenomena of experience in due order; while “empirico-metaphysical” might designate the system which, eschewing concrete problems and dealing exclusively in abstract principles, neither requires nor desires any connexion with empirical research beyond what is necessary to give assurance that its con-

clusions are applicable (in the absence of disturbing influences) to real life: an assurance which is derived from the fact that its data are concrete realities, empirically ascertained. Not that names so cumbersome should be actually employed, but that the briefer terms, "empirical" and "metaphysical," should be understood as signifying the same things, respectively, as the more definite, but more inconvenient, designations. Be all this as it may, it is confidently believed that the outcome of the experiment in method to be described presently and practically illustrated subsequently in the management of the present inquiry, will be the conviction that a modification of the existing terminology of the subject should be introduced, with a view to conform to an improved practice in systems of research, whereby the concrete sciences will be made as empirical, and the abstract sciences as metaphysical, as the circumstances of each case make possible: the several designations of the respective methods involving no imputation of lack of philosophic system in the empirical, nor of painstaking verification of premisses in the metaphysical, procedure.

The next thing in order is to reach a definite understanding with regard to the limitations of the inquiry which we propose to undertake. In the first place, then, we have nothing to do with Sociology at large. On the contrary, the utmost purpose of our investigations is simply the formulation of a body of prescripts of practical action for the promotion of progress, and hence, as the necessary intermediate step, the discovery of the natural laws which condition this forward movement. (It was this pursuit of the knowledge of abstract laws that we had in view when alluding, as

above, to the novelty of the use of empirical methods to the extent proposed in our programme, for that purpose.)

In accordance with our system, our first inquiry is directed to the discovery of what human experience has to teach us respecting the prosecution of researches of this kind. Two examples of such are available for our purpose: one of them ending in failure, the other crowned with success.

The first of these is the case already under discussion, to wit., that of the classic Political Economy. What can we discover in respect of its failure to provide for the statesman and the philanthropist, precepts of practical action in relation to the production and distribution of wealth? *

Without attempting a general review of all the circumstances contributing to this failure, we find one so comprehensive and so adequate in itself, that there is no call to look beyond it. This explanation is found in the failure to carry out its own theory of its own method respecting the verification-test, sometimes as to its data, and always as to its conclusions.

A statement so sweeping, respecting a system commanding the homage of the whole civilized world to the extent enjoyed by this one, requires that it shall be supported by evidence that must compel every intelligent and unbiassed mind to recognize it as conclusive.

* In theory, that system proclaims itself a hypothetical science, expounding simply the constant relations exhibited in economic phenomena. In practice, however, as will presently be made abundantly manifest, it undertakes to give positive and authoritative advice respecting such concrete problems as the regulation of international trade, etc.

Fortunately for us, with our limited available space, the materials for such a demonstration have been prepared for us by one of its most distinguished champions, the late Professor Cairnes, from whose *Lectures on "Logical Method"* we draw the substance of the foot note appended hereto.*

The second example which we draw from practical experience in the management of concrete problems connected with the science of wealth, is that of the successful man of affairs. There is a whimsical feature to be remarked in both these examples, as follows:—

* In illustration of the manner in which the great founders of the classic Political Economy were enabled to establish some of the fundamental principles of the science according to the methods he has been describing, Cairnes cites a number of examples. A careful analysis of these, *seriatim*, will be found instructive.

The first in order occurs in the third Lecture on Logical Method, and is introduced thus :

“Here is an example of the manner in which he” [Ricardo] “could wield this instrument of economic research” (the experimental hypothesis). “The question under consideration was the fundamental principle of international trade, and Ricardo wished to show that it might be the interest of a country to import an article from another, even though it were in its power to produce the imported article itself at less cost than it was produced at in the country from which it came. This, at first view, paradoxical position, Ricardo thus by a simple hypothesis . . . was enabled to establish; it being evident that, under the supposed circumstances, the known motives of men in the pursuit of wealth could only lead to the very result asserted. ‘Two men,’ he says, ‘can both make shoes and hats, and one is superior to the other in both employments; but in making hats he can only exceed his competitor by one-fifth, or 20 per cent., while in making shoes he can excel him by one-third, or 33 per cent.: will it not be to

In the case of the classic Political Economy, a logical method is circumstantially set forth, which, however, is not the method which it employs; and in that of the business-man, he would be as much surprised to learn that he *had* a logical method, as was Monsieur Jourdain to discover that he had been talking prose all his life without knowing it, or John Stuart Mill to be shown by Cairnes ("Logical Method," Lecture II., § 1) that he had included the laws of matter among the premisses of his reasoning upon such subjects as Rent, the Law of Diminishing Returns, etc. Yet, notwithstanding

the interest of both that the superior man should employ himself exclusively in making shoes, and the inferior man in making hats?" "

Referring to the above in another place (Lecture IV.), Cairnes says: "I have already quoted the passage in which Ricardo . . . was enabled to establish it as a doctrine of economic science by a direct appeal to the motives which engage men in the production and exchange of wealth."

We find several things to note concerning this illustration.

1. The subject upon which the science here undertakes to give advice does not belong to the category of strictly-abstract principles with which alone the science (on its theoretical side) is represented as dealing. To the business mind, on the contrary, the advice is of a very positive character, upon an unmistakably-concrete problem of national policy.

2. The "doctrine" "established" is a deduction from certain of the "great controlling principles" of the science. According, therefore, to the canons of that science, it is to be subjected to verification. Is there any sign of it? Assuredly not.

3. Had it been employed, the following cases of Things Overlooked would have been brought to light, with consequences to the doctrine more disestablishing than the contrary:

a. The "two men" of the hypothesis stand for two

ing the absence of any conscious employment of a system, on the part of the successful business-man, it is easily demonstrable that an analysis of his methods in determining upon a course of action in a given case, discloses a uniform and clearly-defined procedure by which he reaches his conclusions. To arrive at a clear comprehension of this method is of the very first importance in the present inquiry, because the problem with which we are here concerned is, in the strictest sense, a business one, as will be made more and more evident as we enter further and further into its details.

modern industrial nations. Each of these has always on hand, unemployed, a large amount of labor and of capital. (See page 292, *infra*.) This being called to mind, it is by no means self-evident that these men will, each of them, find it to his interest to lie idle himself while he pays the other for making for him one of his supplies. The assumption that each will always have Demand holding out its purse to induce him to turn out his maximum production of hats or shoes, as the case may be, will be long in finding verification in the "actual course of events."

b. Since the "inferior man" (nation) exploits in his shoe-making, outside of the materials employed therein, only such of his resources as he has no other use for, the cost, to him, of the home-made shoes embraces no other noteworthy items than the diminution of his resources in materials; whereas, for the shoes made for him by the "superior man" (nation) he must pay out, make over, part with, the wages of that party's labor and the profits of his capital, as well as the cost of the materials. See page 292, *infra*.)

c. The "inferior man" being permanently existent, the development of his productive power (with consequent development of character in him) will be a matter of much greater real moment to him than the mere mercantile question of immediate cost; hence a decision of the shoe-supply question without cognizance of this, the chief factor in the case

Hence we may reasonably expect to gather valuable instruction as to our logical procedure from an experience so closely analogous to our undertaking.

The Business Logical Method may be described thus:—The first step consists in the assemblage of all the related phenomena, in due perspective of their relative importance under the conditions prevailing at the moment, and then in the anticipation of actual results by framing conjectural or hypothetical plans and observing how each of these would work out. The proceeding may be illustrated by that of the chess-player con-

would be thoroughly unscientific and amazingly unbusiness-like.

d. Ricardo's reasoning in this instance, being founded on the assumption that international trade is a direct barter of goods for goods *between individuals*, loses all pith and pertinence when that assumption is disestablished, as it can readily be on the direct, positive, and express authority of Ricardo himself. (See pages 339-377, *infra*.)

Cairnes's next example relates to Tooke's inquiry into the classic doctrine of the relation of the volume of money to the prices of things. From a plain, common-sense, business, point of view, there is something inexplicable in the citation of this case in illustration of the triumphs of scientific method in the discovery of principles, as understood and practiced by the classic Political Economy; seeing that, in point of fact, Tooke, attacking the classic positive and unconditional doctrine that the purchasing-power of money is inversely as its quantity—"one of the most elementary principles of the" [classic] "theory of money"—applies the verification-test utterly ignored in the classic treatment of the subject, and conclusively disproves that doctrine as classically expounded. Nor is this all. Notwithstanding this invalidation, recognized so unconditionally as we here see it to be by Cairnes, the classic Political Economy has complacently retained the shattered principle in full authority, force, and effect, as a

ducting a game blindfolded. He ranges the imaginary pieces on an imaginary board, each one in its own proper position to represent the state of the game as it stands at the moment at which we look in upon him, and then, keeping in view the rules of the game and the probable effects of the move he will make on the mind of his antagonist—the other party in the transaction—he pictures to himself a variety of combinations and compares the results reasonably to be expected from each in turn. It will be seen that one feature of the method, both of the business-man and of the chess-

fundamental feature of its theory of international trade. (See page 352, *infra.*) Thus we behold two strange things: namely, first, the employment of a demonstration of the neglect of an indispensable precaution and the consequent erroneousness of a doctrine, as an illustration of the scientific precision of the convicted system; and, second, the circumstantial and approving description of the method by which a doctrine which remains one of the most important among its data has been shown to be both untenable and misleading.

Cairnes draws his next illustrations, three in number, from *The Wealth of Nations*. Two of these need not detain us, as they are simply intended to show Adam Smith's method of establishing an economic law by an appeal to certain principles in human nature or in physical nature external to man; and these bring out nothing germane to the present discussion that is not more clearly exhibited in the third example, to which, therefore, we shall now turn our attention.

“Again,” says Cairnes, “reasoning against another doctrine of the same school” [the mercantile] namely, “that the regulation of trade by a system of duties and prohibitions was indispensable to the commercial prosperity of the country, Adam Smith thus argues:

“‘This is to direct private people in what manner they ought to employ their capitals, and must in almost all cases be either a useless or a hurtful regulation. If the produce of

player, distinguishing both from the method of the abstract reasoner, is this, namely, that they concern themselves not at all as to the questions of abstract superiority in importance among the various data, regarded without reference to any particular conjuncture of circumstances—as, *e.g.*, the classic political economy selects its “predominant principles”—but, on the contrary, confine their attention to the relative importance of each of the data under the special conditions of the particular case in hand, and stake their chances of a correct conclusion on the completeness

domestic can be bought there as cheap as that of foreign industry, the regulation is evidently useless. If it cannot, it must generally be hurtful. It is the maxium of every prudent master of a family never to attempt to make at home what it will cost him more to make than to buy. The tailor does not attempt to make his own shoes, but buys them of the shoemaker. The shoemaker does not attempt to make his own clothes, but employs a tailor. The farmer attempts to make neither the one nor the other, but employs those different artificers. . . . What is prudence in the conduct of a private family can scarce be folly in that of a great kingdom. If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry employed in a way in which we have some advantage. The general industry of a country being always in proportion to the capital which employs it, will not thereby be diminished, no more than that of the above mentioned artificers, but only left to find out the way in which it can be employed with the greatest advantage. It is certainly not employed to the greatest advantage when it is directed toward an object which it can buy cheaper than it can make. The value of its annual produce is certainly more or less diminished when it is thus turned away from producing commodities evidently of more value than the commodity which it is directed to produce.””

with which they both note and weigh every factor is a clear and accurate comprehension of the End that each seeks, and the danger that lurks in the of a Something Overlooked is ever present in the as much of the business-man as of the chess-player. So much for the business method of formulating the problem. When he has mentally worked out a hypothetical line of action, he proceeds to verify the conclusion reached, by reference to his past experience wherever his memory supplies a case sufficiently analogous to yield pertinent suggestions. The process

Once more we perceive that the illustration dispels Cairnes's assertions, both as regards the character of the standard upon which advice is given, and the employment of verification. The question discussed is the practical and concrete one of legislation in regulation of trade, and as for the verification of the conclusion reached, it is completely ignored. The most striking thing to be remarked is the complete dependence of the argument upon the premiss thus stated:—"The general industry of the country being always in proportion to the amount of capital which employs it, will not thereby be diminished, no more than that of the above-mentioned artificers, but only left to find the way in which it can be employed with the greatest advantage." In other words, everything hangs upon the soundness or unsoundness of the principle of the Limitation of Product of Capital. It behooves us therefore, in order to get at the significance of this example of the classic method, to go one step and inquire how this fundamental datum in the theory was arrived at: to ask from what premisses the original conclusion was made, and what the process of verification through which it was confirmed and established. This takes us into Book iv., chapter ii., of *The Wealth of Nations*. We then see how it reached by a process of *à priori* reasoning, as follows:

"The general industry of the society can never exceed what the capital of the society can employ. As the number of workmen that can be kept in employment by any particular

which he has had to pay on former occasions for erroneous conclusions, fixes strongly in his mind the lesson taught thereby; so that his verification-process is applied invariably and with keen attention. The success which distinguishes this business method in the selection of a line of action is, according to the laws of the empirical philosophy, the best possible evidence that it is the one best adapted to the characteristics of the human intellect when employed in the pursuit of knowledge applicable to practice. In unquestioning submission, therefore, to the injunctions of

person must bear a certain proportion to his capital, so the number of those that can be continually employed by all the members of a great society must bear a certain proportion to the whole capital of that society, and can never exceed that proportion. No regulation of commerce can increase the quantity of industry in any society beyond what its capital can maintain. It can only divert a part of it into a direction in which it might not otherwise have gone; and it is by no means certain that this artificial direction is likely to be more advantageous to the society than that into which it would have gone of its own accord."

It is to the above, doubtless, that reference is made in the extract cited by Cairnes, namely, "The general industry of the country being always in proportion to the capital which employs it," etc., for it is the only one bearing on the subject in this direct manner, from the first page of *The Wealth of Nations* to the last. Such being the case, it would seem that its author reasons in this case as if the proposition set forth as above were either identical with or necessarily involved the other proposition, namely, "The entire capital of a country available for investment in productive industry is always thus invested."

All things considered, it seems well-nigh incredible that this should be the actual state of things. Observe:—it is not a case involving directly the question of firmness of grasp of facts—a department in which we are already beginning to distrust

that philosophy, we definitely adopt the method of the successful man of affairs, and in reminder thereof we shall occasionally refer to our system as the "Business" Science of Human Progress. Furthermore, taking up the analysis of the details of the business logical procedure with a view to determine its most characteristic and distinguishing feature, we readily recognize the fact that it is to be found in the vigilance exercised therein for the detection of a factor that has previously escaped observation. In consequence, we set up as the cardinal principle in the conduct of our investiga-

the authorities of the classic system. On the contrary, the lapse—if such, indeed, it really is—occurs in the management of a syllogism; in the drawing of a conclusion from certain data. Then again, it is not simply a chance slip of the author of *The Wealth of Nations*. This reasoning has been accepted without hesitation or hint of demur by the entire school of Economics of which he is the founder. [Consult, for example, Mill, *Principles of Political Economy*, I., v., 1, where the proposition that "industry can not be employed to any greater extent than there is capital to invest" is treated throughout § 1 as identical with the proposition that "laws and governments can not create industry without [first] creating capital."] It would seem much more probable that there is a lurking fallacy in our own reasoning. Yet there is really no appearance of anything difficult or recondite about the subject. There is no apparent call for wisdom supernal to put the argument into plain and simple language thus:—"The industry of a country can not expand beyond the limits imposed by the amount of capital invested therein: therefore there can be no capital in the country available for such employment, that is not already thus invested." But the logic of such reasoning would not be caricatured but accurately represented by the following illustration:—"The tethered horse can drink no more than is put into his bucket: therefore there is no more water in the well." We can not but repeat the expression of our surprise, amounting

tions the maxim that the Pursuit of the Something Overlooked is the Grand Organon of the science aforesaid.

There remain certain explanations respecting matters of detail, as follows:

In the first place, a word on the subject of Definitions. It will be as much our aim to avoid putting into precise and definite terms the meaning which we wish the reader to attach to any word prominent in a discussion—especially when used to designate the subject discussed—as it is the aim of the abstract

almost to incredulity, that such a logical lapse as this should be found in the pages of *The Wealth of Nations*, and that it should meet the unqualified acceptance of the entire hierarchy of the classic economists from that day to this. Casting about for an explanation of a phenomenon so surprising, the suggestion occurs whether it may not be traceable to the fortuitous use by Adam Smith of the expression, “the general industry of the country being always in proportion to the capital which employs it;” for, certainly, it would be difficult to invent one more likely to induce a confusion of ideas, under cover of which the unquestionable proposition—“the general industry of a country is always in proportion to the capital which sustains it” might be converted into the questionable—and, by the verification-test, indefensible—one, “the general industry of a country is always in proportion to the capital of the country” :—a case in which the premiss asserts nothing respecting the assumption on which the conclusion is founded, namely, that “the capital of the country,” and “the capital invested in industry” are mutually-convertible terms. Perhaps, however, the confusion of thought may be due to another instance of nebulosity in the language, this time to be found in the other quotation from *The Wealth of Nations*. If we take therefrom the following sentence, and read it with the bracketed words in order as here presented, we have this result, namely:

As the number of workmen that can be kept in employ-

reasoner to present a clear-cut definition of every expression he employs that is capable of more than one interpretation. He is operating in the realm of abstract speculation. The data of which he takes note are specially mustered for the purpose, abstraction being made of everything beside. He is concerned with the symmetry of his syllogism, and with that alone. But with us there is no question of symmetries. There is but one question of correspondences, namely, the correspondence with concrete existence; and the concrete, as a rule, is asymmetrical. To undertake to introduce

ment by any particular person must bear a certain proportion to [that part of] his capital [that is invested in the industry in which they are employed], so the number of those that can be continually employed by all the members of a great society must bear a certain proportion to [that part of] the whole capital of that society [that is invested in the industries thereof], and can never exceed that proportion.

Do we not have here the reasoning which our author supposed himself to be employing? However, be the explanation what it may, it seems impossible to escape the conclusion that the logic of Adam Smith's demonstration of the principle of the limitation of production by capital, as presented by Cairnes, is as represented in our illustration of the tethered horse.

There can, of course, be no contention respecting our assertion that the verification-test in this instance was completely ignored. Had it been applied, the consequences must have been such as will be found described in another part of this essay. (See page 293, *infra.*)

[It fatigues the imagination to attempt to follow out the consequences to economic science, had Adam Smith applied, instead of ignoring, verification in this instance, and had in consequence arrived at the conclusions reached by the appeal to the facts in the case, as presented in the discussion just referred to. With the doctrine of the Limitation of Production

into the philosophy of the concrete the methods of definition appropriate to the philosophy of the abstract, is to attempt to crystallize a colloid body.* Whenever possible, therefore, the example of Jones of Haileybury will be followed, who, in his essay on Rent, declines to define the word, on the ground that if any reader, during the inquiry, is puzzled to know what they are observing together, he would be sorry, but he is quite sure that he should do him no real service by presenting him in the outset with a definition to reason from. It will be the constant aim to employ such language as shall

* The writer has a vague impression that this illustration is a suggestion of the memory. In any case, it is too apt to be rejected.

by Capital eliminated from the first principles of the classic Political Economy, the results would be the same in many other cases as in the present one, in which,—with all due deference be it spoken—the disestablishment of that doctrine leaves the argument as empty as a discarded snake's-skin.]

But these remarks upon this last of Cairnes's illustrations do not exhaust the criticisms to which it is justly exposed. There are points not yet mentioned, in this argument of Adam Smith's, which, for lack of the verification-test, he employs as incontestible truths, whereas they are in fact but mistaken assumptions:—the Something Overlooked has been left free to do his impish work.

One such instance is the following:—“What is prudence in the conduct of a private family can scarce be folly in that of a great kingdom,” says our author. On the contrary, it may be precisely that thing. The assumption here of the identity of interest as between individual and nation, overlooks something vital. That something is this:—No attempt has been made to inquire into the difference between the cost of production, on the one hand to the producer exploiting his own resources, and, on the other, to the producer hiring the use of

leave the reader in no doubt as to what it is that he is asked to think about, while at the same time avoiding everything that might distract his attention therefrom by suggesting other possible aspects of the subject. Definition is of course inevitable where a word is used in an unaccustomed or a specially-restricted sense, simply for the purposes of this essay alone, and without intending to disturb ordinary custom in the use of it. Such cases will be met with hereinafter, as, for example, in the arbitrary and merely provisional use

the resources of others; nor to ascertain whether the cost of production, to a nation, comes within the former or the latter category. But by reference to page 323, *infra*, it will be seen that the verification-process makes it plain that the cost to the individual may be much greater for the domestic than for the imported article, while the home product is much the cheaper to the nation: the contrariety of interests being as marked in importance as it is unmistakable as a fact.

"If a foreign country can supply us with a commodity cheaper than we ourselves can make it," etc., says the expounder. Now we know very well the manner in which the estimate of cost here is intended to be made, and consequently are aware that in the cost, to the nation, of producing the commodity are included the wages of the labor and the profits of the capital employed. But when we turn to page 478, *infra*, we discover that the verification-test in this case reveals the Something Overlooked in the circumstance that the earnings of its labor and its capital can not be elements of sacrifice, of expenditure, of cost, to a nation.

"Better buy it" [the cheaper foreign commodity], continues our author, "of them with some part of the produce of our own industry," etc. But by reference to page 347, *infra*, it will be seen that the verification-test discloses the Something Overlooked in the assumption that goods are actually exchanged between individuals. This something has already been sufficiently discussed (see page 143, *supra*) in connexion with

of the term "well-being" to signify, as its chief element, the comfort that comes from the possession and judicious use of the means of satisfying the physical wants; and "welfare" to designate the combination of satisfactions derivable from well-being, with those having their source in elevation of character.

Closely connected with the subject of definition is that of the use of capital letters for the purpose of indicating something beyond the ordinary in their signification. They will be found employed in three

Ricardo's argument. "The general industry of the country . . . will . . . only be left to find out a way in which it can be employed with the greatest advantage." The thing overlooked here, which is that the assumption that Demand can always be depended on to turn up somehow or other whenever needed, when subjected to verification shrivels out of sight, as shown already (see page 142, *supra*) in the connexion just referred to above.

The great importance of the subject has tempted us to devote to this particular one of Cairnes's illustrations an amount of space which leaves us little to spare for his final example, to wit., Ricardo's method in his discussion with Say concerning the theory of Rent. Nor need it detain us long. We note, in the first place, that here at last, unlike the previous instances, the subject is one which, by Cairnes's method of treating it, is made sufficiently abstract to be consistent with his description of the kind of advice in which his science deals. But here the consistency ends; for in this, as in all previous cases, we find no suggestion of verification as having any place in the classic method. The illustration has no further use for us, the discussion relating exclusively to conclusions true only in the absence of disturbing causes. One such, by the way, we discover to be indicated by the prominent and striking "residual" phenomenon that the Law of Rent appears to bear no part whatever among the influences determining the settlement of the question how much a tenant shall pay his landlord in a given case.

ways in the succeeding pages. According to the first method, they will be used to distinguish the word when capitalized from the word when not. For instance, the word "capital" will denote wealth applied to productive enterprise, while "Capital" will signify the capitalist-class generalized into an abstract conception which includes, along with the idea of individual personality in the material of its make-up, not only the contributions of these individuals in Wealth, but also in Management—in capitalist-labor as well as in

Such are the results of our analysis of these examples presented by the latest authoritative exponent of the classic logical method, in order "to show the kind of proof on which the great masters of Political Economy rested their discoveries." (*Logical Method*, Lecture IV.) It would seem but reasonable to suppose that the same characteristics as regards scientific accuracy and system in the logical procedure which mark these, will be found to distinguish the entire body of the reasoning of the classic economists. It would indeed be strange if the inherent vice in method which could mislead "the school of economists of which Adam Smith may be regarded as founder, and J. S. Mill as the . . . most distinguished expositor" upon such vital subjects as are discussed in these examples of Cairnes's, did not produce similar results in the classic treatment of other cardinal principles of the science. And such will prove to be the case. As our investigations carry us on from theme to theme, from point to point, the business sense detects the neglected factor which, once recognized, compels the reconstruction of the entire fabric. Not only in the things of which the classic Political Economy treats—taking one side, as, *e. g.*, in the case of the Law of Diminishing Returns, the Law of Population, the Nature of Wealth and of its Consumption, the Product of Labor and its Relation to Distribution, the Relation of Capital to Production and Distribution, and the like; or taking both sides, as, *e. g.*, in the case of the question of the Supply of Capital,—not only in

capitalist-possessions. In like manner, "labor" will mean the exercise of the human faculties in productive work in the broadest sense of the terms "exercise" and "faculties" that is consistent with the exclusion of the exercise of the faculties of the capitalist; whereas "Labor" will refer to those who sell the use of their faculties in production, generalized into a class co-ordinated with "Capital" as the purchaser, the party of the second part, in that sale. Thus the line of division between Capital and Labor is different from

these things of which it treats, but in the things which it ignores, as, *e. g.*, the question of the Function of the Nation, of Cosmopolitanism against Nationalism, the sudden increase of wealth-creation, etc., etc.—a fatal omission dogs the steps of the ill-fated system at every turn. Unless some equally persistent and elusive fiend has had his will of our work, as this one of the work of the classic Political Economy, the evidence will be accumulated until it becomes irresistible, that that science is built out of fallacies as a brick wall is built out of bricks.

Another suggestion occurs:—Must the pursuit of scientific precision in the realm of the concrete, relegate to an inferior position that noblest exercise of the human intellect, to wit., its free range in the wide realms of abstract speculation: must the study of the play of human nature in that field in which it bears so conspicuous a part,—the economic—be regarded with diminished respect because its conclusions are not to be accepted as the final word on problems of practical action?

Let us borrow a hint from the writer whose works have recently engaged so much of our attention, and see if it may not lead us out of this difficulty. In speaking of the aim of Political Economy as being the exposition of the laws of wealth, he adds that he takes it for granted that a knowledge of these laws "is a desirable and useful acquisition, both as a part of a liberal education, and for the practical pur-

that between capital and labor. Again "the labor-class" will denote that part of the population which embraces (1) those who depend upon the exercise of their faculties, whether as wage-workers or as self-employers in shop, field, or what not, for the means of their subsistence ; (2) those directly dependent on the above class for their support ; and (3) all those whose living depends on the patronage of the laborers and their families to an extent that creates economic interests in common with them. According to the

poses to which it may be applied." Let us, following up this suggestion, conceive of the science as separated into two distinct lines of study, according to the final object and aim of each, respectively:—the one being plainly and squarely recognized as a department of metaphysics, pursued for the sake of the intellectual development to which it will minister, and the exalted intellectual pleasure it will yield ; the other being made an integral part of the Science of Human Progress, under whatever designation the latter may be known.

This arrangement of this department of human knowledge would seem to be the natural and logical one, if the following hypothesis is a correct generalization of the phenomena of the case, to wit:—The explanation of the remarkable phenomenon of the regular, uniform, consistent, failure of the classic Political Economy to deal successfully with the problems of actual existence lies, first, in the fact that the body of thinkers who have undertaken the task, is precisely the one among all men of high intelligence that is the least qualified for it ; and, second, that it has chosen the method of research precisely the least suited to it. This hypothesis can be defended on the following grounds :

There are certain facts of human nature too familiar to be gainsaid, among which are these; that it is as true of the mental as of the physical constitution that, even as a faculty tends to be developed through its exercise, so does it tend to be atrophied by its disuse : that natural aptitude for a particular

second method, the capital letter will serve to indicate that the word in that case stands for a phrase. For example, "demand" will carry the usual meaning, whereas "Demand" will signify "demand for the product of the act, or enterprise, or trade policy," or what not, under discussion at the time. According to the third method, the capital letter will call special attention to the word as the one dominating the thought at the moment. This is of course a revival of an old custom, which would seem to have been for a time

form of mental effort tends to create a preference for it over other mental work; while a deficiency in native facility in respect of a certain kind of intellectual effort tends to generate an aversion thereto; and, in consequence, that there usually occurs, in the mental development of each individual, a cumulative gain in the powers most conspicuous in his native intellectual equipment, with corresponding cumulative impairment of those of which the natural endowment is most defective. Again, this constitutional tendency to the enhancement of an inborn superiority or inferiority by reason of preference for the easy and successful, and hence satisfaction-bringing exertion, over the laborious and ill-performed, and hence unsatisfactory and repellent effort, is nowhere exhibited more strikingly than in the case of a natural bent toward abstract speculation, on the one hand, and the weighing and analyzing of concrete facts, on the other. What is delight to the one inquirer is drudgery to the other. And in precisely the same way that the observation of the minutest shades of difference in concrete phenomena gives the keenest delight to the one class of investigators, while the hair-splitting distinctions of the metaphysician are a weariness to the flesh, does the work of accumulating, sorting, and discriminating among a mass of discordant, elusive, and many-sided facts seem to the mind accustomed to shape its material to suit itself, a task too odious, too utterly beyond the possibilities of scientific treatment, to engage the powers of those competent to adventure in the loftiest regions of thought.

driven out of use by the senseless extreme to which it had come to be carried. Now that the protest has been effectual, it seems worth while to try whether the unquestionable advantages of the practice may not be enjoyed without its being again perverted into a nuisance. This latter view would seem to be gaining ground among the most eminent of the writers of the present day.

The general scheme of the work may be outlined as follows:—As our researches are concerned, first with

In consequence, the naturally weak and uncertain grasp of fact is made weaker and less sure, until the mental shortcoming in the realm of the concrete becomes as conspicuous as the mental keenness and vigor in the realm of the abstract. Now the natural bent and intellectual training and practice of the classic economists made it inevitable that they should fall into metaphysical methods in the treatment of economic principles, and that their grasp of concrete fact should be too feeble, too loose, to permit of their duly appreciating the incongruities between their hypothetical conclusions and the actual current of events. But the one special feature of this unfortunate combination of unfitness in the inquirer with unfitness in his method is this, that the specific danger to be guarded against in the framing of positive advice in respect of practical action, is the one concerning which the classic system, instead of providing a safeguard, constructs an elaborate pitfall. Counsel in relation to a business problem—as we shall presently have occasion to observe—founded upon reasoning that overlooks an essential factor in the case, is bound to be misleading,—perhaps fatally so. The Something Overlooked, therefore, is the special danger alluded to in the present case. Now observe how the metaphysical method handles this difficulty. Repelled by the odious complexity of the economic phenomena of real life, it seeks to reach generalizations which shall reduce everything to order and system through a process of putting aside the refractory phenomena, as they turn up, until it has reduced the data of its

principles and next with their application, the treatise is divided into two departments; the first of these being devoted to Theory, the second to Practice. The Department of Theory will embrace five Books, to wit, I., the present one, which describes the Theory of the Logical Method employed; II., which sets forth the general Theory of Human Progress; III., devoted to the Theory of Wealth; IV., to the Theory of Character; and V., which presents a Summary of the results obtained in or derivable from the previous Books;

reasoning to a group, every member of which is amenable to explanation by the preconceived hypothesis. Encouraged by the number of phenomena which it finds to yield to this treatment, it sets up this hypothesis as a great law of nature, and it has a perfect right to do so as long as it recognizes its true character as a principle true only in the absence of disturbing causes. But the great difficulty is this, that its weakness of grasp of fact causes it to disregard this fact of the hypothetical nature of its law, and to ignore the other fact of the danger of the lurking Something Overlooked, and to employ this principle, arrived at through methods purely metaphysical, to positive use. All this comes about in the most natural manner, because of the facility which the process of abstraction affords for the overlooking of essential data. It could not, if it expressly tried to do it, better provide the crypt in which the mischief-working imp can keep out of sight at the critical moment.

If the above is a true representation of the facts, the remedy suggested seems eminently fitting. The training of youth in the concrete science, and the advising of the statesman and the philosopher in social and economic problems, will be confided to those whose natural bent had early inclined them to studies, whether of real life or of books, of a kind to develop a strong interest in the analysis of facts with a view to the interpretation of their philosophic significance, and in consequence create an ever-ready insight that looks beneath the surface of

thus rounding out the Theoretical Department of the treatise, and bringing to a close the pursuit of the first object of our undertaking, namely, the accumulation of the knowledge requisite for the framing of Working Hypotheses. The second, or Practical, Department will be devoted to the second object of our efforts, to wit., the accumulation of a body of such hypotheses presented in the form of precepts of concrete action.

things and discovers their hidden bearing on the business affairs of the individual, the nation, and the race. The most precious qualities of the business economist will be those which enable him to read, as a plain and simple story, the records of the past economic and social experience of the nations, and the daily happenings of ordinary life; separating with intuitive and at the same time practiced insight, the significant from the insignificant, the instructive from the trivial; and with perfect, scientific, freedom from bias, for or against any preconceived theory: his only predilection being for that which the facts teach. On the other hand, the prosecutors of the Abstract Economies, absolved from all responsibility as to the manner of the application to the art of government of the principles which they expound, can continue to employ the economic field of human action as the source of their data for the speculative study of the play of human motive, enjoying the delights of conscious superiority in the formulation of their grand generalizations, and developing to a higher excellence the intellectual powers of themselves, of their disciples, and of the gild of thinkers, the world over: no more disquieted by the consciousness that society no longer looks to them for guidance in practical action, than is the skillful jeweller, secure of his superiority in the polishing and setting of gems, because he is not asked to lay down the pavement of a thoroughfare.

BOOK SECOND.

Theory of Human Progress.

CHAPTER I.

GENERAL OUTLINES.

Having, upon apparently satisfactory grounds, determined upon the method of our inquiry, let us try to acquire a clearer understanding of that which we are seeking. It has already, in a general way, been indicated as a system of prescripts of action in the realm of the concrete, for the furtherance of human progress, to be arrived at by methodical research among the data of human experience. But it behooves us now to get into closer touch with our work: to block it out in more practical terms. Let us, following Lewes,* give to this system, regarding it in its philosophic, rather than in its scientific, aspect, the designation of the Philosophy of Human Progress; signifying thereby the Explanation of the Phenomenon of that movement; and proceed to gather what suggestions we may from his treatment of the subject. "Humanity," he says, "is a growth, as our globe is, and the laws of its growth are not yet discovered." One of these

* *Comte's Philosophy of the Sciences*, by G. H. Lewes, Part I., Sec. II. Geo. Bell & Co. London, 1890.

laws has, as he thinks, been discovered by Comte, and set forth in his Fundamental Law of Evolution. Before taking this up, he discusses the question whether the various conditions of social existence are dependent on, or correspond with, conditions of scientific development, and finds his answer in J. S. Mill's *Logic*; being in substance as follows:

In order to obtain better empiric laws, it is necessary to combine the static view of social phenomena with the dynamical, and thus obtain empirically the law of correspondence, not only between the simultaneous states, but between the simultaneous changes in the separate elements of society. This law of correspondence it is, which will become the real scientific derivative law of the development of humanity and of human affairs. In the difficult process of observation and comparison which is here required, it would evidently be a very great assistance if it should happen to be the fact that some one element in the complex existence of social man is pre-eminent over all others as the prime agent of the social movement. For we could then take the progress of that one element as the central chain, to each successive link of which, the corresponding links of all the other progressions being appended, the succession of the facts would by this alone be presented in a kind of spontaneous order, far more nearly approaching to the real order of their filiation than could be obtained by any other merely empirical process. Mill finds this predominant and almost paramount element among the agents of social progression, in the state of the speculative faculties of mankind. Notwithstanding the fact that intellectual activity in the pursuit of truth fills no large place in

the lives of any save decidedly-exceptional individuals, yet its influence is the main determining cause of the social progress; all the other dispositions of our nature which contribute to that progress being dependent on it for the means of accomplishing their share of the work. Social existence is possible only by a disciplining of those more powerful egoistic propensities, which consists in subordinating them to a common system of opinions. The degree of this subordination is the measure of the completeness of the social union, and the nature of the common opinions determines its kind. But in order that mankind should conform their actions to any set of opinions, these opinions must exist; must be believed by them. And thus, the state of the speculative faculties, the character of the propositions assented to by the intellect, especially determines the moral and political state of the community. Every considerable advance in material civilization has been preceded by an advance in knowledge; and when any great social change has come to pass, a great change in the opinions and modes of thinking of Society had taken place shortly before. From all which we are justified in concluding that the order of human progress in all respects will be a corollary deducible from the order of progression in the intellectual convictions of mankind; that is, from the law of the successive transformations of religion and science.

It is to be observed that in all this, Mill deals with the question of Instrumentalities, not Forces. He shows clearly that it is through Knowledge that Progress is realized; but the main question behind this is of the supply of knowledge. His suggestion clarifies the

situation so far as to refer the searcher after the springs of progress, to the sources of new knowledge, rather than to suggest a clue to that knowledge. But his hint is valuable. His remarks in substance tell the searcher that if he can instruct the scientific mind as to the natural laws of the subject, the instruction will bear fruit in human progress, through the working of the law of the hegemony of the scientific illuminati. Thus, when we have exhausted his suggestion, the prime agency of the social movement—understanding by that phrase the underlying motor-force of that movement—still remains to be drawn from the dim realm of things undiscovered.

We turn now to another source of suggestion, to learn what it may add to Mill's implied advice that we should seek to supply the leaders of thought with a systematic conception of the natural laws of progress. We find one such in Cairnes's discussion of the methods of dealing with the complexities of the social phenomena. (*Logical Method*, Lecture III., § 2.) Referring to the position of an inquirer coming for the first time to the study of the reasons of things, he says:

“The most striking feature of the situation would be the extraordinary variety and complexity of the phenomena presented to his gaze, contrasted with the absence of any clear indications of the causes at work or the laws of their operation. He would find himself in a mighty maze, possibly not without a plan, but offering to the student no apparent clew by which to thread its intricacies. No wonder that, in the presence of such a problem, the primitive thinker should have yearned for some comprehensive and all-explaining principle, and should have directed his efforts at once

and by whatever means to supply this capital requirement." He recalls Bacon's description of the human mind, impatient of uncertainty and suspense, straining after the discovery of some ultimate force, some paramount and all-pervading principle, by recourse to which light may be let in among the confused and jarring elements of the world; and adds that it was to this that the efforts of the earliest thinkers were invariably directed. Nor were they wrong, he contends, in the importance they attached to the possession of such a stand-point; only, unfortunately, they mistook the means of securing it, and instead of proceeding by sap and mine, endeavored to carry the position by a *coup de main*. He cites the example of the most important physical sciences, in whose history there was a long period of groping among discordant phenomena, terminated by the discovery of some one or two great physical truths; after which the fruits of such discovery were rapidly gathered in in the shape of the explanation of numerous subordinate phenomena of human experience relating to the subject of inquiry. He takes as an illustration, the discovery of the law of Gravitation, which, once that it was established, became the generative principle from which all the later discoveries in astronomy have been derived.

We now begin to gain a more business-like insight into our subject. We perceive that what we are to look for is (1), subjectively considered, a great co-ordinating concept, a comprehensive and all-explaining principle, upon which as upon a nucleus of crystallization, all other related concepts derived from concrete experience will, according to the laws of the human mind, spontaneously arrange themselves in systematic

connexion; and, (2) objectively considered, the corresponding paramount and all-pervading principle, from whose operations, under whatever modification of circumstance, arise all the related phenomena.

Before entering upon the active prosecution of this inquiry, let us heighten our interest in it by contemplating for a moment the result of a successful issue of our undertaking. Recalling what Cairnes has pointed out respecting the changes wrought on the purely-physical sciences by the discovery of the great co-ordinating concept, the one all-pervading influence, which, once that it was recognized, enabled the prosecutor of each to regard the related phenomena simply as multiform manifestations of that influence—as effects of which it was, whether more or less directly, the cause:—recalling this, we readily comprehend what marvellous results for the cause of progress may be expected if, through the discovery of that comprehensive principle, it should become possible to construct a systematic Science of Human Progress. To be such, it must sweep away the obstructions which pseudo-science has set up in the path of progress. But with this accomplished and the true scheme of nature unveiled, we may look with confidence for great consequences. Instead of Helplessness, we should have organized endeavor; instead of Hopelessness, courage, energy, bright and inspiring anticipations; and instead of Hate, the frank recognition of community of interest, resulting in community in effort, whence again a better knowledge of each other as among the different classes, and out of this, mutual confidence and esteem and mutual good offices, giving, as the final crowning of the auspicious series, a vast increase in

productive capacity as regards the physical basis of Comfort, and most encouraging expansion and elevation in respect of Character. Reverting to Mill's indisputable proposition respecting the Leadership of the Thinkers, and connecting therewith the equally-indisputable fact that the question in hand is the most important to man that man has ever asked himself, we gain some approximation to an adequate conception of the light that must break upon the prospects of the race if the answer to that question is found. We behold, in fancy, the thought embodied in that answer placed at the command of that intellectual vanguard as a torch given into the outstretched hand of Science, thenceforth to light up the path of the generations. Under such conditions—the correlated agencies of progress, the Thinkers and the Thought, being at last developed, through the long, long, periods of evolution, into fitness for their office—the march of improvement must take on a speed and steadiness of movement that will cause the philosophy of the future to contemplate the history of human terrestrial experience as divisible into two distinct epochs, namely, the Pre-Systematic and the Systematic periods.

Without further preliminaries, we now attack the problem of the discovery of the Great Co-ordinating Concept; the Progress-Principle in the evolution of civilization; the Growth-Force in human society.

Let us begin with an attempt to reduce the problem to the simplest terms possible. It is to be noted that we have here to deal with both physical and psychic phenomena. We will therefore look about us for an example as nearly as possible analogous to it in other respects, but differing—and very much simplified in

consequence—in the circumstance that it exhibits physical phenomena alone. The case which most readily suggests itself, is that of vegetal evolution. In this we have the growth-principle, uncomplicated by psychic phenomena. Now an analysis of the phenomena in this instance plainly reveals the mechanical features of the growth-principle as consisting in an orderly accumulation of cell from cell; and the motive-power of this movement as being a certain "vital principle," inherent in the original germ, the seed. We know not why it is thus, nor, in fact, what this vital principle is, any further than to recognize what it does—but this we know perfectly; and this is all that we—who propose to confine our investigations to questions of concrete action—are seeking to understand in the present instance.

Returning now to the case of the social evolution, we ask, What are the most conspicuous phenomena of human progress; in other words, what is the paramount distinction between the least and the most advanced types of humanity? It lies, manifestly, in what they are, and what, in consequence, under the existing conditions of their several environments, they do. Now it is easy to trace back their actions to their wants; for their actions are the result of their will, and their will, in turn, is directed by their wants. Taking up next, therefore, the phenomena connected with their wants, we readily distinguish a certain feature which rouses our keenest interest with a vague promise of a clew. That feature is this, namely, that the satisfaction of any want gives rise to the development of another want, and the new want is, under normal circumstances, *of a higher order than the want*.

whose place it takes. Why this is so, we could not discover if we tried; and if we could, the question would be out of place here. If it is so, that fact suffices for our business purposes: and that it is so, we know if we know anything.*

Now, have we not here the object of our search? Have we not in this Law of the Evolution of Human Wants, the great generative principle from which all the minor principles requisite for the construction of a systematic Concrete Science of Progress can be developed? The question is one of such transcendent importance that we must not at once rush out into the

* The following extracts from the work so frequently mentioned in the Introduction, to wit., Dr. Menzies' *History of Religion*, are so full of suggestions pertinent to this subject that we cannot refrain from giving them a place:

"It was stated in our first chapter that religion is the expression of human needs with reference to higher beings, who are supposed to be capable of fulfilling men's desires, and it was also stated as an inference from this, that the growth of human needs is the cause of religious change and progress. If this is true, then the key to the progress of religion is to be found in the successive emergence in human experience of higher and still higher needs. If we can discover the order in which higher aspirations successively emerge in the growth of humanity, then we shall possess the chief clew to the course of religious advance. Now, while there is infinite variety in the needs and desires of men, every land and each nation having ideals all its own, we can yet discern, on a broad view of human progress, an advance from lower to higher needs which is common to the human race, and manifests itself in the history of each nation. . . .

"The leading classes of the State at least, having gained some measure of security and leisure, ideas of a nobler order spring up in their minds." (pp. 424-426.)

highways shouting "Eureka!" but address ourselves with patient industry to the task of working out an answer according to the verification-method of our empirical system.

There are two lines of evidence, either of which may be employed for establishing the claim of a theory to the rank of a trustworthy empirical principle. These are, (1) regarded as an abstract proposition, the completeness with which it includes all the known related phenomena in a single comprehensive generalization ; and (2), considered as a precept of guidance in concrete action, the success with which it supplies clear, positive, and feasible injunctions relating thereto. Let us now apply these tests to the case in hand.

First in order, then, we have the explanation of the phenomena presented in the history of human progress. These may be divided into three classes, according as they relate (a) to the race, (b) to separate social organizations, and (c) to the individual.

a. As regards the race at large, its experience on the subject is embodied in the Confucian precept, "To elevate man, feed him first, then instruct him."

b. The history of the change from savagery to civilization, in tribal and national associations, presents a uniform and consistent record of forward movements originating from a proportionate increase in man's command over nature, in that tribe or nation : in other words, in the command of the means for the satisfaction of wants as they are developed. Not only so, but in those abnormal cases of retrogression from a higher to a lower order of civilization which the history of the race presents, we find—strange as it may seem—equally emphatic testimony in support

of our hypothesis. We do not refer here to those great cataclysms in which vast empires have been overthrown and their civilization blotted out. The causes of these are to be looked for elsewhere, and will command our attention in connexion with a different line of inquiry (see p. 405, *infra*). The instances of a devolution instead of an evolution of progress which afford material for the present discussion are those in which a part of a progressive nation, instead of sharing in the forward movement of the rest, not merely lags behind it, but actually loses ground from generation to generation, in respect of every essential feature of civilization. In order to obtain a more business-like view of this matter, let us take an object-lesson from two contrasted examples in the experience of a generally-progressive modern nation, as follows:

In the organization of the North Western Territory, the United States Government reserved the north-eastern corner thereof, and made it over to the State of Connecticut, in settlement of her claim to a strip of land having the same width as that State between her northern and southern boundaries, and running westward to the Pacific Ocean. The Connecticut Government sold out this tract, sub-divided into farms and town-sites, to her own citizens exclusively, on specially liberal terms. Under these conditions a systematic emigration took place, which resulted in a wholesale transplantation of families, neighborhoods, schools, religious and other associations and institutions, creating a new Connecticut—on a new soil, indeed, but with every appliance for the development and the satisfaction of the wants of a thrifty and prosperous, intelligent and progressive, community.

With a bracing, but salubrious climate, land readily cleared and generously responsive to good husbandry, an unlimited market for their products, situated as they were upon the great east-and-west line of travel and traffic, and thus kept in close touch with all the great movements, commercial and intellectual, of the civilized world; while the level roads, farm-to-farm compactness of population, and habits of neighborly intercourse combined to create an environment highly favorable to the growth of needs, tastes, desires, and aspirations, ready to supply fresh stimuli to exertion as the more urgent needs were satisfied, the people of the "Western Reserve" have, from the earliest to the latest period of the history of the State of Ohio, maintained a position in the van of its splendid progress. From this inspiring history of one experience in emigration we turn to another less attractive.

A combination of depressing circumstances—chief among which was the hostile legislation of England respecting her linen industries—caused a large emigration from the North of Ireland of the descendants of the Protestant Scotch settlers in that region. The great bulk of this emigration directed its course to the United States of America, and of this a portion spread itself sparsely over the wild mountain regions of the States lying to the southward of Mason & Dixon's line. Here was a people exhibiting, in every important particular, a close analogy to the Connecticut adventurers into the Western Reserve. In racial derivation and characteristics, in acquired habits, in intellectual and moral development, in wants and the means of satisfying them, the two were so nearly alike, at the time of their emigration, that it would be difficult to decide

which of them could justly claim superiority in civilization. The striking differences between them developed in their successive generations must therefore be attributed to differences in the influences of their several environments; making, in the first instance for advance, in the second for relapse. It is, then, to the phenomena of the environment of the Scotch-Irish emigrants in their new homes that our attention must now be directed, although, unfortunately, our limited space compels us to devote but a hasty glance to this interesting study.

Pioneer life in those densely-wooded, rugged, and vastly-extended regions, destitute of any but the rudest means of intercommunication among the widely-scattered individual holdings and with the outside world, necessarily involved the sacrifice of every taste, every satisfaction, save that of the most primary needs. The very first generation born into the new conditions would have no experience beyond that of the winning of the means of a rough subsistence. The satisfaction of the most rudimentary wants would tax to the utmost the powers of these adventurous spirits who, casting loose from an advanced civilization, had sought out an arena wherein to try conclusions with untamed nature according to a more primitive fashion, and leave them no opportunity, however strong the desire, to supply other needs. Their offspring would know nothing of all those influences which had served to inspire their own youth and earlier manhood with a sense of a higher order of wants, nor of those conditions which had enabled them, in a greater or less degree, to satisfy them. The earliest impressions of life in these children of the wilderness would be those of a constant

struggle for a very bare existence. In so far as this was won through the avocations of the husbandman,—the pioneer of civilization and progress, accumulating, under favoring conditions, the means of supplying an ever-increasing variety of wants—life to them would be associated with the idea of monotonous and slaving toil, uncheered by any opportunity of recompense through the exchanging of a part of the product for other objects of desire. In so far, on the other hand, as the rude wants which alone could be satisfied thereby were met through the avocations of the hunter,—the type and exemplar of arrested development, individual and social, achieving no results which provide the means for the satisfaction of any beyond the most primitive of human needs—life to them would be associated with the keen delights of the chase in the virgin forest well stocked with game, and, to all intents and purposes, the pioneer's own domain, varied by intervals of abandonment to all the animal enjoyments of sloth. Can we entertain a doubt as to the effects of such a combination of incidents?

The contrast between the enterprising, aspiring, invaders of those wilds and the first generation born and reared therein must have been great indeed, and it no doubt gave the former many a pang of anxiety for the future. But what could avail all that they would attempt in the way of resistance to the influences of the environment, under the unfavorable conditions of their toilsome existence? They would, doubtless, bring to bear on the minds of their children such rudimentary elements of education as they had time for, supplemented by descriptions of the varied exist-

ence of the civilized communities which they had left: but what shall we say of these when it became a question of the enlightenment of *their* offspring by the forest-born and forest-nurtured generation? Human nature would be other than it is, if the adjustment of wants to the capacity of satisfying them, had not in this instance been speedily made by reducing the number and the character of the needs to a level with the willingness to provide the means of supplying them.

Need we seek further for an explanation of the phenomena presented to-day by such regions as the "pauper counties"** of Kentucky, the scenes of the family feuds of West Virginia, or those portions of the South inhabited by the "cracker" and "clay-eating" populations?

If, then, we regard these two episodes in the history of American civilization as experiments made expressly for the testing of the Want Hypothesis, can there be any hesitation as to the character of the result? Is it not manifest that there can be but one interpretation of the facts here presented?

c. When we come to the consideration of the phenomena of individual existence, in respect of their bearing upon the question of the verification of that hypothesis, we discover a condition of things strongly contrasting with that which we found to prevail in the cases of the race at large and of separate social organizations; for, whereas in these we had no difficulty in recognizing the most satisfying evidence of the

* Counties in which the expenses of the Courts of Law have to be borne in part by the State.

soundness of that theory, we now find ourselves confronted by a mass of phenomena, not simply endless in number, but also perplexing because of inconsistency in purport; and we perceive that we must penetrate beneath the surface of things if we would bring these superficially-discordant facts under our explanatory generalization. We are, in fact, reminded of the appearance presented by a great river in flood, when the observer might be puzzled, amid the endless swirls and eddies, to discover from an inspection of any one small portion of the surface, the general direction of the flow; and we can make sure of it only when we can extend our gaze over the entire stream, or at least over a considerable body thereof. To select an example is like choosing a specimen pebble out of a bed of gravel, but a few typical cases will serve to give some notion of the facts at large.

How, for example, shall we reconcile with our hypothesis of a natural evolution of human wants, as set forth above, the familiar spectacle of individuals who, having acquired the command of means adequate to the satisfaction of every desire useful to themselves, instead of showing a disposition to seek constantly after higher and yet higher gratifications, exhibit, on the contrary, with each new accession to their wealth, an increasing absorption in the sordid pursuit of further gain? The difficulty here, however, is more apparent than real, and vanishes on a closer analysis of the facts, as follows:—The condition upon which a new want springs up in the consciousness is this: that a place is created for it by the *removal* of another want. The individual in the assured possession of the means for a satisfactory gratification of the wants of food, raiment,

and shelter for himself and those dependent on him, has room for the growth of other wants, because these former wants, by virtue of the fact of their present and assured future satisfaction, are neutralized, annulled, as objects of attention, of effort, of planning and striving. The want-field is cleared of them, and that exuberant soil, impatient of barrenness, sends up a new crop. Our hypothesis, it will be remembered, holds that in that natural law of its being which, as human experience demonstrates, causes this soil to put forth on the vacated space, a growth of a higher order than that which occupied it previously, we discover the motor-force underlying the forward movement of our race.*

With these facts before us, we revert now to the case of the insatiate money-seekers, which seemed to impugn the natural law on which our whole theory of human progress hangs. We perceive at once that the term "insatiate" explains all. The want is *not* satisfied. On the contrary, it is intensified. It grows by what it feeds on. The true explanation, therefore,—the generalization that covers all the phenomena—is this:—The natural law in question is not applicable in case of the ever-hungry greed of gain, because the necessary condition, the indispensable prerequisite of its action, is the removal of the lower want: and that we have an illustration of the soundness of our chief hypothesis in the fact that when the exceptional event occurs of the persistence of a given want, to the prevention of the growth of a successor, there is arrest of progress, if not actual retrogression.

Among other phenomena of individual existence apparently inconsistent with our chief hypothesis, the following is a conspicuous feature of our modern

* See supplementary note, page 555.

civilization. A certain portion of that part of the population which commands the means of satisfying a wide range of wants, avowedly devotes its entire attention—so far as it may be said to have any method at all in the ordering of its existence—to the pursuit of pleasure: a good which it proposes to attain by amusing itself. Owing to the diversity in individual conceptions of what constitutes amusement, the professional pleasure-seeker may be found, in one instance devoting his faculties and his fortune to sport of various descriptions, in another to the absorbing inanities of fashion, or to a combination of these and other forms of supposed personal enjoyment; the distinguishing feature common to all being the absence of every other consideration than that of obtaining satisfaction out of existence without taking any account of that which flows from duties frankly recognized and cheerfully fulfilled. It is plain that in this familiar puenomenon we have a much more perplexing problem than that of the persistence of a low order of wants, as exhibited in the cases of the slaves of avarice and the insatiate seekers after the power that accompanies inordinate wealth. In the instance now in hand, we have the fact of an unmistakable decadence, an unsocializing of the individual, a reversion toward a low egoism, however cloaked beneath grace of manner, and cultivation in taste. Manifestly, the method of existence of this class is inimical to social progress, whether in respect of the development of productive power or the elevation of character in the mutual-benefit association of which the purly self-seeking individual or class is a part. It would seem incontestible that we have here come upon a distinct instance of failure in our supposed natural

law. It must, in fact, be recognized as such unless we can point out a disturbing influence which sufficiently accounts for the non-working of that law in this instance, or can define the limitations within which alone the law can be expected to be operative. With this view, let us subject the facts at our command to a somewhat closer analysis, as follows :

The essential point is this, that we have here come upon an instance, and a conspicuous one, in which, although all the more imperative rudimentary needs of existence are abundantly satisfied, and, in consequence, the conditions supplied for the working of the law of the evolution of wants as we have formulated it, that law does not work: on the contrary, instead of a higher order of wants supervening to engage the faculties in the effort for their satisfaction and thus enlist in the work of progress the individuals concerned, there springs up a crop of desires manifestly inimical to the progress of the individual and to that of the social organization of which he is a part. Under the circumstances, we must, it would appear, appeal to the analogies discernable in the universal experience of the concrete in general, to wit., that the existence of a normal carries with it the implication of the existence of a correlated abnormal: that a rule is made more definite by the discovery of an exception thereto. This leads up to the question, Are we then justifiable in classifying this case as abnormal, and, if so, upon what grounds? Here we can see our way more plainly. The case is clearly an abnormal one, because, under the operation of natural law, this class of the community is not only limited as to self-propagation, but carries with it the seeds of dissolution. As a rule, its

members have inherited, not accumulated, their wealth, and it is simply a question of time when they or their progeny shall, by the shrinking of their resources, be driven to the exercise of their faculties in the provision for needs having a more normal relation to the scheme of human progress. It is true that, should the conditions which develop this class continue in force, the supply of new members must continue also; but we find an additional indication of the abnormal character of this class in the circumstance that the scheme of progress includes the means of its suppression. A brief review of the related facts will make this sufficiently obvious.

When the Systematic Period shall have been established in any community, and, in consequence, a right understanding of the mutual relations between the individual and the nation, and the mutual obligations resulting therefrom, shall have become the commonplace of every citizen of reasoning age therein, the pressure of public opinion will be such that no individual with sufficient self-respect to keep him out of the hands of the police will find any satisfaction in an existence modelled on the lines of the self-indulgent man of pleasure. To live without an aim elevating to the individual himself and calculated to discharge his obligations to society will, in the days of noble ideals pursued upon principles of systematized business sense, involve consequences from which all but the most degraded must shrink.

What, then, are the conditions here under which the abnormal becomes the normal: what are the circumstances as regards individual character and environment under which the higher, fail to

take the place of the satisfied lower, wants? There must exist a physical basis in the form of adequate means for pursuing a life of (so-called) pleasure; and a psychic basis, (1) in an insensibility of the individual concerned respecting the character of his plan of existence; and (2) a like insensibility on the part of the public. We have already noted the measures embraced in the natural laws of progress for the dissipation of the physical, and the removal of the psychic, conditions which render possible this excessiveness upon the social body.

We now see that, properly understood, the phenomenon of a purely amusement-seeking class is to be regarded simply as a passing incident of the forward movement, and to be contemplated by the believer in a natural scheme of progress with no more disquietude than that with which he views the somewhat analogous phenomenon of the modern tramp: convinced that, as the latter will be readily and satisfactorily dealt with when economic science has instructed Governments how to provide opportunities of employment for all, so must the former become impossible when it becomes disreputable.

Considerations of space compel us to bring to a close at this point our presentation of that body of evidence which relates to the completeness with which our theory of human progress explains the related phenomena. If we have overlooked nothing essential, the result would seem to be satisfactory.

We now come to the second test of our main hypothesis, to wit., the character of the conclusions it reaches, regarded as leading principles of concrete action. This inquiry calls for no protracted elabora-

tion. The whole may be epitomized in one comprehensive injunction, as follows:—To further the progress of a society, satisfy the existing wants and give knowledge of others of a higher order to fill the places thereof; and natural law will complete the work. Thus the latest experience of civilization closes the cycle by swinging round to its earliest:—feed first, then instruct.

Let us pause a moment at this point, to take note of where we stand. Our main hypothesis would seem to have endured satisfactorily the two primary tests. It provides an adequate explanation of the related phenomena of human experience in the past and present, and a clear, positive, and feasible plan of action for the future. That is to say, it does all this, so far as we are able to see, thus far. Whether this is to continue to be the uniform result, remains to be seen, but our experience, assuredly, justifies a still further and hopeful prosecution of the verification-process, and we therefore proceed to devise such additional trials as shall reduce the matter to the nearest possible approximation to absolute certainty. With this end in view, let us recur for a moment to the examples of the purely-physical sciences alluded to above, seeking for suggestions supplied by the experience gained in those cases, in respect of the results which followed the discovery of the paramount principle in each. Without entering upon details readily worked out for himself by each reader familiar with the general subject, we content ourselves with the assertion that such an inquiry will satisfactorily establish the fact that the light shed over the entire body of the phenomena by the discovery of the co-ordinating idea, enabled the

prosecutors of the science speedily to reach satisfactory explanations of many of the most important of the minor phenomena; and that thenceforward fresh examples have been continually presented of new knowledge leading up to yet later knowledge, in all those sciences in which the nature of things allows an adequate field for such expansion. Now, surely, a better test of our hypothesis could not be suggested than to try how it meets the requisites of a guide to further discoveries in its own field. Let us proceed, therefore, without more ado, to make the trial, as follows:

All of the requirements which go to make up the goal of human progress may be embraced within two classes, to wit., those which relate (1) to Comfort, and (2) to Character. According to our fundamental hypothesis, our business science enjoins upon us, as our primary and paramount object, the satisfaction of human wants. We therefore lay out our present work as consisting in the discovery of the right theory of action for the satisfaction of the wants relating (1) to Wealth-Generation, and (2) to Character-Building. We will now take these up in order.

The process of Wealth-Growth consists of the following movements, named here in the order of their occurrence in the history of any one body of wealth; to wit., (1) Demand, (2) Production, and (3) Consumption. These three movements constitute a closed circle, Demand creating Production, Production Consumption, and Consumption Demand. The manner of the operation is as follows:—Demand is a compound of two elements, each of them indispensable, as follows, to wit., (1) a desire for the wealth object, and (2) the

possession, on the part of the demander, of other wealth sufficient to constitute such remuneration as will induce some one else to produce the object desired.* Production consists in the direction of the human faculties upon natural objects in a manner to impress a change upon those objects, fitting them for Consumption. This fitness is designated by the term "utility." The objects thus invested with utility, become "wealth," by virtue of that fact. Consumption has three separate and distinct functions. One of these is the removal, from the product, of the utility which Production had imparted to it. The removal of the utility from the object destroys the latter considered as wealth: utility being an indispensable attribute of wealth. The second function of Consumption is the conversion of the wealth thus abstracted, into well-being in the individual performing the consumptive operation. Contemplating these two functions in combination, we perceive that we may regard Production and Consumption as two successive steps in a single process, to wit., the extraction of human well-being from otherwise inert natural material: the first step consisting in the preparation of the crude matter for the consuming, and the second in the performance of that operation, with the result of conferring well-being on the consumer. The third function in question is the restoration to Demand of that measure of efficiency which had been nullified by the production of the wealth consumed. When the consumption is applied to the whole of the wealth produced, so that

* It is unnecessary for our present purposes to take note here of the case of production for the use of the producer himself.

all of it is converted into welfare, the cycle is broken, then and there, as in the case of barter for immediate consumption, on both sides. When, on the contrary, the product is, to any extent, reserved from consumption, the reserved portion constitutes the energizing element in new demand, and the cyclic movement is preserved so long as this state of things obtains. Hence in the business of a great community, a modern nation, the cycle is perpetual.

We now approach the point to which all this has been meant to lead us up, to wit., "What principle of growth is discernible in these movements?" The answer is to be sought in the analysis of each in severality.

1. Demand. This, as we have already observed, is a complex of two separate forces, namely, (1) the desire for the object, and (2) the command of the means to back the desire. How then as to these? As regards the first of them, the desire, the principle of growth in this case, is so conspicuous a feature in our leading hypothesis that the matter needs no further discussion. But the supply of needs is not the point. They are of no practical account except when backed as already described; and it is plain that, so far as concerns the wealth dedicated to the vitalizing of mere desires into "demand" in its economic signification, the cyclic movement is depleting exclusively.

2. Production. Here, as we see at first blush, we detect the object of our pursuit. Here is the growth-principle, plainly enough. Under normal conditions, when the cost of the productive operation has been deducted from the wealth represented by the difference in value between the raw materials and the finished

product, there is found to remain a Something Over—a Surplus—which is new-born wealth, literally a new creation, inasmuch as it is, in a material sense, a case of making something out of nothing, a thing of mental attribution, a psychic entity incorporated in a physical object and hence possessing an impact on things concrete.

We are now in a position to formulate our first subordinate hypothesis relating to the main or Want-Hypothesis, namely, the theory of concrete action for the providing of the physical basis of comfort, in the following terms:—The production of wealth involves a series of correlated movements in the nature of a closed circle; each separate movement depending, as to its magnitude, upon the magnitude of the movement immediately antecedent thereto; and the growth-principle inherent in this complex of operations is found in the natural law of Surplus in the Normal Productive Movement.

Let us now apply to this subordinate hypothesis the same test as that to which its principal was subjected, and inquire (1) how it works as a generalization explaining all the related phenomena; and (2) what kind of guidance it will afford us respecting questions of concrete action.

1. Explanation of phenomena. Ransacking the experience of the race at large, of the several nations, and of the individual, we fail to find a single discordant fact.

2. Advice concerning the practical application of its conclusions. There can be no question as to the positiveness and feasibility of its obviously-inferential injunction, as follows:—Provide, as far as possible, the

conditions favorable to the free play of natural law in the cyclic movement, including the shielding thereof from disturbing influences.

Of course, the nature of the case is such that no verification of the hypothesis can be derived from the facts of experience; the system—as will be developed in the course of our later investigations—having never been tried except partially, fitfully, and in total ignorance of its true principles, and the results obtained having been the subject of the most persistent contrariety of opinion. But no phenomena can be adduced which are not capable of a perfectly reasonable explanation according to the principles set forth above.

Considerations relating to system in our procedure move us to arrest at this point the further trial of the Comfort-Hypothesis, to be resumed after we have brought the Character-Hypothesis to a similar state of development. To the latter work, therefore, we now address ourselves, formulating the character-problem in the shape of the question, “What can human effort do to promote the evolution of character in the individual, the social organization, and the race?”

Before entering on this inquiry, however, let us devote a moment to the subject of that Ego with which everything relating to character is so closely connected. The first phenomenon that strikes us when we enter upon this field, is the fact that Humanity, instead of being incorporated in a single personality—as is readily conceivable—is subdivided into a number of individuals, each with his own separate physical and psychic organization, and each being a unit in the constitution both of a social assemblage and of a general aggregation of the race at large. The study of character resolves

itself into a study of motive. Human motives may relate (1) to the interests of the Ego; or (2) to those of an Other Ego or body of Egos; (3) to those of the social organization of which the Ego is a part; or (4) to the interests of the race at large. We have already recognized the fact that the motor-force of human action is traceable back to the wants of the Ego. But we now perceive that the Ego is something more than itself. It is Ego *plus* a constituent part of an association—which fractional part we represent by *x*—and it is also Ego *plus* *x*, *plus* *y*:—*y* representing an individual part of humanity. Then there is also *The Other*. Now, if the interests of the Ego, of *x* and of *y* were all and always identical, our problems of concrete action would be none the more complicated because of the division of the interests of the Ego into personal, social, and racial, and we should have to deal simply with the interests of the Ego and those of *The Other*; but, taking things as they stand—and our loyalty to rigorous empiricism leaves us no choice in the matter—we must accept the fact, so easily verified, that, whatever may be the final future outcome of the evolutionary process which it is the aim and purpose of our present labors to promote, so far as the present condition of things (superficially considered) is concerned, the diversity in interest as between each Ego and the social organization to which he belongs, and between him and mankind in general—as also between the Ego and *The Other*—is very marked indeed. Hence we conclude, *a priori*, that the play of motive in the Ego who recognizes, to any practical extent, his relations toward any of the outside interests must be of a complex character; and this conclusion is abundantly verified

by a reference to the phenomenon of everyday life. So obvious a feature of the natural order and constitution of things has of course given rise to much philosophizing on the subject in its endless variety of aspects, and, unfortunately, with the result, for the most part, simply of obfuscating the situation:—of darkening counsel. We have here a point which calls for deliberate treatment, and the exercise of our keenest insight; for the significance of the phenomena is not to be skimmed off the surface, and the attainment of a right comprehension of the matter is of the utmost importance. For our practical purposes, we must understand the natural laws of human Motive, as the skilled engineer understands the management of Steam.

Two diverse theories of the subject may be framed from the phenomena of human experience, and the selection of the correct one of these, as worked out below, affords a striking illustration of the superior precision of the empirical over the metaphysical method when the aim of the inquiry is the discovery of the right principles of concrete action. According to one of these theories—the one which would appear to have the adhesion of a great majority of those who have given any sort of systematic thought to the subject—there exists in the psychic constitution of man, two distinct and mutually-antagonistic propensities, of which the first impels the Ego to the conservation of its own interests, to the detriment of the interests of The Other; whereas the second influences the Ego toward giving the preference to the interests of The Other, even to the detriment of its own. Thus the two propensities are as distinctly individuated, the one from the other, as the antagonistic deities of the

Zorastrian Religion :—the God of Good, and the God of Evil. With this as the co-ordinating concept of the hypothesis, the resultant prescript of concrete action is inevitable, namely:—Suppress the Egoistic, cultivate Altruistic, Propensities. Now the symmetry of this theory of the contending forces is exceedingly attractive to the inquirer habituated to abstract methods, and in the absence of any systematic and skillfully-conducted verification-test, it presents the appearance of a generalization which co ordinates all the facts into one harmonious whole, and every requirement of logical precision appears to have been met. We are undeceived only when we come to formulate the opposing theory of the subject and to carry out, in a systematic manner, the empirical verification thereof. Let us proceed, therefore, to this formulation and verification, without further preface.

According to the second theory of Egoism, Self-Seeking, or Selfishness, this passion or sentiment is, in point of fact, one single, ever-abiding, all-controlling, quality or attribute of the human psychic constitution; the varieties, and even the express contradictions, in the workings of which are to be explained as being all equally effects of this cause, appearing as different manifestations of a single principle operating under different conditions. Those actions which we call "altruistic," "unselfish," and the like, and the sentiments which constitute their underlying motor-force, are due to the fact that the Ego, the Self, is of a kind that feels a stronger interest in the good of The Other than in its own; so that the conditions—as regards that particular instance—are such that the Ego finds, in the preference, for the nonce, for the good of The

Other its own best good. The Ego is called upon to choose between two courses, and, in obedience to the laws of its being, it adopts that one which procures for itself the greatest measure of satisfaction. The Ego is, in such a case, none the less egoistic because it is altruistic:—the change is in the Ego, not in the act nor the sentiment behind the act. The fact is simply that when the conditions relating to its character within and its environment without are such as to make the altruistic course the more egoistic of the two, the Ego pursues it. Let us proceed to the verification of this co-ordinating concept before taking up the formulation of the resultant precept of practical action.

What light, then, do the related phenomena give us on the matter in hand? The further we push our analysis of the related facts of human experience, the more industriously we strive to reach the right interpretation of their significance, the more clearly the conviction is brought home to us that, as regards the more progressive part of the race, Selfishness appears to us as a force in a constant state of flux under the influence of a series of progressive changes in the character of the individual's wants, and presenting to the view of the inquirer a succession of states or stages, each capable of distinct differentiation from the rest, yet each blending by insensible gradations into those which immediately precede or follow it, and all capable of combination in all manner of proportions, any one or more with any or all of the rest. These states or stages we may discriminate as follows:

1. Selfishness controlled by purely personal desires, without regard for the rights, feelings, or interests of others;

2. Selfishness controlled by the desire of the applause of others ;
3. Selfishness controlled by a sense of duty; and
4. Selfishness controlled by a spontaneous impulse to seek pleasure through causing pleasure in others.

1. For the proper consideration of the first of these aspects of the self-seeking impulse, we must proceed according to a method which we shall frequently have occasion to employ in the course of our researches, namely, to begin with a search for the Physical Basis of the condition, movement, or whatever may be the subject of the inquiry in hand. In the present instance, in which we inquire as to the relation of this lowest form of selfishness to the natural phenomenon of human progress, we perceive that it is upon this state or stage of the sentiment that nature depends for the conservation of the physical basis of human progress, in the preservation of the existence—and the suitable existence—of the human individual. The paramount importance of this function necessitates a degree of effectiveness in this form of egoism incalculably greater than that of any of the other forms thereof, or, for that matter, of the whole of them combined. So obvious is this primary and indispensable requirement, that the form of selfishness that meets it has invariably been recognized in the religion and in the jurisprudence of every social organization, from the earliest to the latest, from the rudest to the most refined, to the extreme of maintaining the right of the individual, under certain conditions, to take human life. The natural propensity designated as "the instinct of self-preservation," thus so universally approved, is so deep-seated and so invariably present in the psychic

constitution of man, and, under extreme conditions, is so utterly irresistible, overwhelming, that, from its very intensity, it tends to become a check upon progress, seeing that the latter is so largely dependent upon sentiments and actions the express opposite of those which this primary and primitive form of selfishness inspires. It therefore becomes a matter of the first importance to ascertain what are nature's methods for keeping this puissant force within desirable bounds. To this, then, we now turn our attention.

The first of these, as being the most obvious, we recognize in what we shall call the Law of Diminishing Utility. We shall best elucidate this fundamental law of progress by an illustration drawn from the non-human branch of the animal kingdom.

We observe two pigs in a pen, at the moment when an abundant meal is poured into their feeding-trough. The larger and stronger does his best, without remitting his guzzling, to prevent the smaller and weaker from getting even a taste of it. We pass that way again presently, and see the unmannerly tyrant of the feast, settling himself down in a corner for a nap, with a grunt of supreme content, while regarding with drowsy and indifferent eyes the frantic appetite with which his late competitor is making up for lost time. How shall we explain this? Has the churlish creature whom we saw but now with both fore feet in the trough, become a convert to altruistic principles, that he should now contemplate with amiable complacency what he before objected to so vehemently? Not at all. The reason is physical, not psychic. The swinish stomach is finite. The need of the consumer is the basis of the utility of the thing consumed. As the need decreases,

the utility decreases with it. Note the profound significance of this fact. Nature thus facilitates the surrender, on the part of the Ego, of the object which The Other desires, by decreasing the temptation to retain it.

A second check upon the primitive form of selfishness is to be found in the Law of Sympathy—the law, that is to say, of that propensity in man's psychic make-up which impels him to suffer because of the suffering of The Other. We have here an illustration of that prevalence of The Unexpected in nature which renders the *a priori*, metaphysical, method so full of pitfalls for the seeker after precepts of action, and compels, in the empirical, such rigid requirements respecting verification. The problem to be solved is this:—Given, on the one hand, a propensity which must, in the interest of the race, ever remain paramount; and, on the other, the necessity of conduct the express opposite of that which the propensity aforesaid would induce: how reconcile the two, so that the needed action may take place without antagonizing the opposing influence? The solution is found in the substitution of The Other for the Ego. The paramount and controlling motive impels toward seeking in preference the good of The Other, because of the fact that thereby is secured a good more desirable to the Ego than the competing good of the Ego itself. The requirements of the selfishness of the Self of this transaction are best obeyed by satisfying the needs of The Other, to the neglect of the needs of the Self, because the Self feels those needs more keenly than its own.

A third restraint upon unqualified egoism is recognizable in

2. The second form of selfishness, namely, that which is controlled by the desire for the applause of others. The gregarious instinct in the race—of the vital importance of which in the evolution of civilization we shall constantly discover fresh illustrations as our inquiry progresses—gives to the opinions of those who come in contact with the individual an incalculable influence on his conduct, because it is through his actions that he exhibits to his public the qualities which he desires that it shall attribute to him. This propensity of the Ego to crave the goodwill of public opinion is the means which nature employs for the solution of another problem, which, when presented in abstract terms, seems to resemble in its difficulty that which we have just been considering, which involved obedience to a principle while acting contrary to it. For, in the present case, the thing to be accomplished is, to cause the sentiments of a society to be of a much more exalted order than are those of its individual members. If the problem related to *declared* sentiments only, the solution would be simple enough. All that would be required would be the assumption of deceit in the professions of the parties concerned:—but this is not the case. There is in every civilized community a sincerely-entertained code of morality respecting selfishness, which is of an unquestionably higher character than that which sways individual conduct when unrestrained by the fear of public sentiment. To cite one illustration out of many available, observe the manner in which individuals shielded from direct personal responsibility will wink at, if they do not absolutely participate in, acts performed in the interest of corporations or other associations with which they

are connected—acts which nothing would induce them to commit, themselves, in the conduct of their own private business: indicating conclusively that the probity shown in the latter is due, not to principle, but to a prudent regard for their reputation. The great value, then, of an elevated public opinion as a factor in progress makes its development one of the most important of social needs. How has nature provided for such a result in the face of the difficulty of awakening the individual conscience to a *working* sense of its shortcomings? The problem is solved, as before, by the existence of a certain propensity, inborn in the human psychic constitution, which operates with the certainty of natural law; that is to say, it is to be relied upon implicitly, in the absence of any disturbing influence. The matter may be stated thus:—The difficulty of convincing us of the impropriety of our own conduct is equalled only by the ease with which we can be made to see blameworthiness in the conduct of others. In fact, a profound conviction of the gravity of other people's offences is recognized by students of human nature as one of the most conspicuous features of our religious emotions. Out of these conditions, nature evolves the more elevated tone of public opinion by deriving it, not from the individual's estimate of the heinousness of a given offence when committed by himself, but from his estimate of its character when committed by others. Passing on now to the question of the effect on individual character of the practice of this second form of selfishness, we readily perceive that its underlying motive is of a low type, *per se*; and that, unless it leads up to something better, the essential features of the individual's character remain very much

the same as if no thought for anyone but himself had been a factor in determining his conduct. But the practice of unselfish acts tends to beget a habit of acting thus, and this in turn has a tendency to induce a preference for the practice that finally takes shape in a settled purpose to follow the dictates of the sense of justice, the promptings of generosity, in order to secure the gratification consequent on the repression of the promptings of the baser propensities.

3. In this way the third stage may be reached, in which, although the downward pull of the lower instincts is still felt, it is successfully resisted, through a sense of duty.

4. The fourth stage may at first sight appear to have much in common with the first. The individual, it may be said, simply takes the course that goes with his humor. He does what is the easiest thing for him to do. He merely follows the line of least resistance. But a little reflection brings sounder views. In the first place, as regards the last objection, he does indeed follow the line of least resistance, but that is precisely what is done in each of the other stages, and, moreover, it is fortunate that it is so in his case, because the fact gives assurance of stability and permanence, seeing that everything is in strict accordance with natural law. Being human, the individual's action will, in the long run, conform to the law of the gravitation of his psychic constitution, precisely as his physical frame must obey the law of physical gravitation. In the next place, if we may not admire him for the action which is simply the result of an unresisted impulse, how shall we sufficiently revere and love the character that begets such generous promptings? We can

applaud and hold in sincere esteem the man who, from a high sense of self-respect, casts behind him the suggestions of his lower nature; but how different our sentiments toward him who needs no such struggle because he feels no such temptation! Finally, the best justification of this preference will be discovered when we come, as we shall presently, to determine the ethical principles of our system, and learn that the highest good of the nation-association is the supreme law, and that the highest morality consists in the conservation of its interests. From such a point of view, and picturing to ourselves a society composed exclusively of individuals actuated solely by a selfishness of this highest order, we can understand why our hearts go out in loving homage toward those who have proved their fitness for membership in such a community.

Let us now take an object-lesson from nature's methods of dealing with these various phases of egoistic sentiment. Our first example shall be drawn from the lower orders of intelligent existence: — let us say from the race of tigers. Owing to the institution of successive generations, there is in the experience of each individual tiger, an earlier period during which it is dependent on the services of another. How, then, is the fierce, relentless, adult creature to be tamed to this altruistic service, involving a constant, deliberate, purposeful, preferring of the good of the other to the good of self? Abstractly considered, the problem appears so difficult as to be absurd. But nature finds an effective solution. It inspires the mother-tiger with a feeling toward her offspring such as renders its hunger more distressing to her than her own, its life more precious to her than her own existence. Hence

she is impelled by the purest egoism to become, in the highest degree and in the most thoroughly-practical manner, altruistic.

For our second illustration we select the case of the evolution of the institution of private property *. The purely-egoistic savage, desiring an object, and desiring also to obtain it with the least possible sacrifice of his love of ease, prefers taking it by force from those weaker than himself. But getting is one thing, and keeping is another. The weakest can at least steal. Now, when it comes to guarding one's possessions, it does not require an extraordinary degree of intelligence, even in a savage, to recognize the fact that it would be a good thing if he could get the entire tribe enlisted in the work of watching his property and — when called for — helping to catch and punish the depredator. Nor would any very great additional intellectual development be needed to enable him to appreciate the suggestion that he could secure the desired arrangement if he would himself refrain, and could induce a preponderant body of his fellow-tribesmen to refrain, from invading the property-rights of others. Thus we see that greed which impels the primitive man to seize upon the possessions of other people, employed in the rôle of the express influence which induces him to abstain from touching them. His desire for property induces him not to take it.

We can find a third example in the development of the sentiment of Patriotism. Observe how each phase

* Objection is sometimes made to the use of the phrase "private property" as pleonastic: but so long as the expression "public property" remains in accepted use, the point does not appear to be well taken.

of the egoistic passion, in regular succession from the lowest to the highest, is brought to bear upon the building-up of the patriotic sentiment, from mere sordid self-seeking into one of the noblest and most ennobling of motives. At the outset, the appeal is made to the purest, most unmitigated, selfishness. The experience of past benefits derived from the Mutual Aid Association called "the nation," "the country," and the confident expectation of the same in the future, constitute sufficient grounds for regarding the preservation of so useful an institution as well worth considerable sacrifice. Next in order comes the satisfaction resulting from the reputation for public spirit and love of country which naturally flows from the acts performed and sentiments expressed under the pressure, at the start, of the lower motive, exclusively or chiefly, but with consequent natural development of an appetite for that kind of applause; this again generating more decided convictions as to the desirability of public spirit and patriotism, thus leading on toward a realizing sense of the duties imposed on the citizen by the benefits he receives from his country, and enlisting his self-respect and desire for self-commendation: this, in turn, furthering the evolution of the spontaneous, unconstrained sentiment which impels him to forbear the pursuit of his own good where it involves the sacrifice of the good of his country; and thence onward, up to the crowning act of unselfishness in which the patriot freely offers up his own life, that the land of his devotion may live.

With this array of facts before us, it would seem that we should now be in a position to assume that our Theory of Character has been brought to a state of

development similar to that to which we had previously carried our Theory of Comfort, in so far as concerns the verification of the co-ordinating concept in the case, and that all that remains for the completion of that development is the formulation of the consequent precept of concrete action, in the shape of an answer to our initial question (p. *supra*) to wit.:—‘‘What can human effort do to promote the evolution of Character in the Individual, the Social Organization, and the Race?’’ This answer we now set forth, as follows :

The question as stated resolves itself, under the light thrown on it by our researches among the related phenomena, into an inquiry into the Evolution of Individual Motive; such motive being regarded as the resultant of the interplay of two unstable forces (or, in the more precise language of mathematical science, as the function of two variables), to wit., the Self within, and the Environment without. These forces being unstable, and hence—as abundantly confirmed by experience—amenable to the influences of human effort, the succeeding question is that (1) of the means by which such effort can be made effective, and (2) of the direction in which the effort should be exerted. Answering the last question first, we say that — since the progress of the race and the progress of civilization may, for the purposes of the present inquiry, be regarded as equivalent and interchangeable expressions — the aim is the socializing of the individual; that is to say, the development, in the individual, of the highest attainable fitness for the social state. Coming next to the question of the means by which the character of the individual may be moulded as desired, we revert to our statement above that it is by operating on his

motives, and this through the modification of the propensities of the Self and the characteristics of the Environment, so as to exploit, to the best possible effect, the great fundamental principle of the Evolution of Human Wants. This leads up to the question of the measures to be taken for the production of these modifications, to which we make answer thus:—First in order, as first in necessity, is the securing of the physical basis for altruistic action, which is to be accomplished by securing, as already described, the free play of the natural laws of wealth-generation, in order that the law of diminishing utility in wealth may freely exercise its function of facilitating altruistic sentiment and practice. Next comes the education of public opinion, whereby to add a fresh impulse in the same direction. To these are to be added progressively, appeals to higher and higher forms of altruistic sentiment, but always in consonance with, and not to the antagonizing of, the natural instinct of self-preservation as made manifest in the lowest in our classification of the forms of selfishness. (For the great fundamental feature of the co-ordinating concept of our character-theory, namely, the oneness of the egoistic motive, as well as the phenomena indicating nature's methods as based on that principle, make the injunction to build every artificial—that is, human—effort on that foundation, the most conspicuous of the conclusions respecting the precepts of action to be drawn from that theory.) This systematic effort for the progressive development of individual motive is to be prosecuted with steadfast devotion to the ideal result of bringing individual motive to be modelled on the recognition, in its full theoretical and practical significance, of the truth that

the highest form of pleasure possible to humanity is found in the pleasure we confer on others.*

Upon the question of the clearness, positiveness, and feasibility of the principles of concrete action thus set forth, we are, in the present state of our researches, unable to say more than to refer to the discussion of its more extended details which is to form a leading feature of our further inquiries. But before entering

* It may be objected to this programme that its most conspicuous feature, namely, the injunction to conform our plans for the furtherance of human progress to the most thorough-going and uncompromising self-seeking, is a base and sordid one, and hence better fitted to induce and to confirm habits of thought and action the reverse of desirable, than to promote the object intended. To this we would answer thus:—

1st. We are empirical inquirers, and must take things as we find them. The question for us is simply as to the facts. Is it so, or is it not so, that we can build on no other foundation than this?

2nd. As empiricists, it is results that we are seeking. If by this method we can attain the exalted state described above — and we know no other by which we can — then, assuredly, we are, according to our empirical philosophy, choosing the most scientific course: we have adopted the right method of gaining nature's rewards for those who comply with nature's conditions.

3rd. The point suggested would be well taken if the action recommended terminated with the appeal to the baser propensities; but such is not the case. On the contrary, the injunction calls for the imitation of nature's methods in employing the more primitive forms of the instinct of self-preservation as the foundation on whose firm basis to erect, out of the appeal to the higher motives, the altruistic structure intended. The plan proposed thus clearly contemplates the conversion of materials which are ignoble while in isolation, into constituents of a structure which, as a whole and in all its parts, is noble.

upon these it will be well to take an observation and ascertain just how far we have now progressed in our voyage of discovery.

In the first place, then, we have formulated our great fundamental co-ordinating concept of the motor-force of human progress, which we have found in the Law of the Evolution of Human Wants. This, our Chief Hypothesis, we have submitted to a primary verification-test, (1) by a comparison with the related phenomena of human experience, and (2) by its capacity to furnish clear, positive, and feasible precepts of concrete action. In the second place, we have in like manner formulated the co-ordinating concepts and precepts of action in the two primary subordinate problems, to wit., those of promoting human progress through the satisfaction of the wants relating (1) to Comfort, and (2) to Character; and have applied to these, so far as the circumstances in each case, respectively, permitted, the verification-tests employed upon the chief hypothesis. The results obtained thus far would seem to be satisfactory. We find confirmatory evidence of the correctness of our chief hypothesis in the fact of the verification of the two leading subordinate hypotheses aforesaid. The progress thus made is encouraging, both because of the fact that it is in the highest degree improbable that an erroneous co-ordinating concept should not break down under so protracted a test of it by comparison with the phenomena of actual life, and because of the circumstance that if the minor details of the further working out of these hypotheses should show as complete a correspondence with concrete experience and with the facts conditioning the related problems, the proof of the soundness of our chief hy-

pothesis becomes final and conclusive, save only the empirical qualification — the proviso that nothing has been overlooked in the case. The method pursued thus far also outlines our work for the remainder of our theoretical department, in this, that in each stage of our inquiry as it proceeds, we arrive at a contribution to the final result at which we aim, to wit., (1) a knowledge of the principles of natural law conditioning the matter in hand, and (2) the advisory precepts of concrete action in the application of those principles.

Having thus gained a systematic conception of the ground already gone over, a few words will now be in order respecting that which it remains for us to traverse. The further particulars to which allusion has been made above, will relate, in the first place, to the evidences to be discovered of provision for the carrying-out of the scheme of progress outlined in our chief hypothesis, in both non-human and human nature, considered in their more general and abstract aspects; such, for example, as the resources in Nature and in Man for furthering the forward movement of the race in accordance with that hypothesis; and, in the second place, to those agencies and instrumentalities of progress, in the shape of the primary class of institutions, which have been evolved under the laws of their being, namely, the Family and the Nation: the latter leading up to the discussion of the minor institutions and arrangements for carrying out the hypothesis in still further detail, such for instance, as the system of Capitalistic Production in the organization of industry. All of these investigations being conducted, as hitherto, not simply for the confirmation or invalidation of the chief hypothesis which they must afford, but also for the contributions

which they will yield (1) to the code of principles incorporated in our theoretical department, and (2) to the practical injunctions laid down in that devoted to concrete action.

CHAPTER II.

EVIDENCES IN SUPPORT OF THE CHIEF HYPOTHESIS, DRAWN FROM THE PROVISION MADE BY NATURE FOR ITS REALIZATION.

Section First—PROVISION FOR PROGRESS DISCERNIBLE IN NATURE AND IN MAN.

I.—THE LAWS OF THE INCREASING AND OF THE DIMINISHING RETURNS FROM NATURE EXTERNAL TO MAN.

When we come to investigate the phenomena of man's natural environment, we readily perceive that, of the circumstances constituting those surroundings, some are of a nature favorable to his progress, while others are inimical thereto. Let us try to get a clearer understanding of this matter.

A.—Increasing Returns from Land.—Geologic science tells us that this planet has, at a former period in its history, exhibited the phenomenon of a globe of mineral matter with a temperature such as would instantly shrivel and convert into ashes and volatile gases any form of organic life with which we are acquainted. Yet we have but to cast the mind's eye over its surface to-day to behold vast expanses of living green,—a marvellous banquet spread for the sustenance of animal life. What, then, is the principle underlying these phenomena?

It is this: that the plant builds itself up, not simply from the inorganic matter of the earth, liquid and solid, but also from the gases of the air. The carbon which constitutes the great bulk of the solid matter of the herbage and the forest has been digested and assimilated out of the supplies furnished in inexhaustible quantities by the ocean of atmosphere which envelopes the globe. Again, in the decay of each vegetal growth, a quantity of the indigestible nitrogen of the air is stored up, in a digestible condition, in the carbonaceous part of the decaying vegetal fibre. Thus, not only does each successive crop, if left undisturbed, return to the soil all that it took from it, but, like a faithful steward, it adds thereto an increment for the benefit of its successor. It is in this way that the deep black mould of the prairie and the savannah has been built up: in this way the stately forest grown where the spare, sapless, lichen once nestled in the sheltering crevices of the otherwise bare and barren rock. Nor is this all. The principle of increase does not stop here. On the contrary, it continues to show itself as conspicuously, under the right conditions—strange as it may appear—in the case of the removal of the crop. As the vegetal tissue is built up from inorganic matter, so is animal tissue from vegetal. The animal creation is sustained by vegetal food, either directly, as in the ox, or indirectly, as in the ox-devouring lion. But instead of this plant-consuming signifying the loss of so much plant-food to the succeeding plant-generation, the diversion of the eaten crop from the natural course of decaying on the spot, to the passage thereof through the digestive organs of the consuming animal, confers upon that crop, by the exquisite art of nature, a higher

degree of efficiency for plant-nourishing. The meadow whose crop of hay keeps in good condition the home flock or herd, can itself be preserved in full fertility by a return to it of a part of the manure from those animals, leaving a surplus to go to the improvement of other fields. Thus it comes to pass that when, in the growing season, our train approaches a town, the aspect of the adjacent country undergoes a striking change. It seems as though some benign influence had been rained down upon it, converting the ordinary landscape into a scene of exuberant fertility. The city of Berlin is now carrying out a system by which a great part of her supplies of agricultural products will be furnished from the rich farms and gardens which, by a scientific utilization of her sewage thereon, she is winning from the sterile wastes of sand about her.

We have been taught to make "the niggardliness of nature" a leading principle of economic science, and there was a certain measure of truth in the conception; for *laissez faire* and starvation go hand in hand, under her laws. But "niggardliness," from a common-sense point of view, seems scarcely a proper characterization of the proffer of a horn of plenty if the beneficiary will but stretch forth his hand to take it. On the contrary, it seems incontestible that nature has placed it within the power of man to make glad the wilderness and the solitary places, and to cause the desert to rejoice and blossom as the rose.

B.—Diminishing Returns from Land.—We are now to investigate certain phenomena of a nature the opposite of those just considered, seeing that they relate to the diminution instead of the

increase of the stock of plant-food. These latter phenomena may be differentiated into two classes, namely, (1) those which are due to natural, and (2) those which are due to artificial, causes.

(1) We observe a constant tendency to the washing-down of the land into the sea. Plant-food being, for the most part, incorporated in loose and friable material, and being frequently, as to itself, soluble in water, is especially subject to this form of economic destruction. We have, in Greece and elsewhere, examples of wide regions once fertile but now utterly incapable of retaining in place—not to speak of feeding—a crop of any description.

(2) The elements of fertility in the best of soils may be rapidly exhausted by the continued removal of the crop without returning anything of a fertilizing nature. The melancholy landscapes of Eastern Virginia, with their endless wastes of red-clay fields bearing the worthless broom-sedge or equally-worthless old-field pine, where once the gigantic forest growth of hickory, white oak, walnut, and cherry, and the splendid crops of tobacco, excited the wondering admiration of the traveller fresh from the rich pastures and bountiful harvests of fertile England, stand to-day like the stubs of a discarded cheque-book: mocking reminders of an ill-spent heritage.*

* It may seem strange that the text makes no allusion, at this point, to the classic Law of Diminishing Returns from land. The explanation is, that, for our science of business economics, no cognizance is to be taken of such a law. From its point of view, that principle is simply one of those ultimate truths which we accept without undertaking to prosecute our inquiries farther back than is needed for a right understanding

Taking a comprehensive view of the whole subject, we conclude that the provision made for human progress, in so far as it relates to the supplies to be drawn from the soil, is, beyond doubt, so ample when pro-

of its consequences and the proper provision for them in our plans and purposes. For what, in final analysis, is this law? It is simply one of the numerous aspects or phases of the physical principle that two bodies can not occupy the same space at the same time. The consequences of this principle are manifested in two elements of cost in production, namely, (1) the cost of the use of the land-surface, and (2) the cost of transporting the agricultural product from the place of its growth to the place of its consumption. These results we take note of as phenomena relating to our science:—as facts to be noted when they stand in a causal relation to other phenomena pertinent to our inquiry.

All this, of course, is at variance with the views of the classic Political Economy, which regards the law of diminishing returns as one of the chief among its data. Now, while it is no part of our business as prosecutors of the practical department of economic science to discuss the position of the abstract department thereof in respect of its estimate of the relative value of its different premisses as bases for abstract speculation, it is proper that we should show that its conclusions on the subject should not be regarded as having any weight as affecting our own. This can be done in few words.

i. The orthodox system defends its exaltation of this law to so high a place among its data, on the ground that, were the law different, nearly all the phenomena of the production and distribution of wealth would be other than they are. (Mill, *Prin. of Political Economy*, I., xii., § 2). Now, however important this fact may be from the point of view of the Hypothetical Economics—and it certainly does afford the basis for an extraordinary range of speculative thought—it is easy to see that it supplies no reason whatever for making it, *per se*, subject-matter for *our* researches. With us this argument has no more force than if it were applied to any one of a

perly availed of that if any restriction upon an indefinite advance beyond the highest civilization yet achieved by the race is to be found, it must be looked for elsewhere.

thousand other physical principles, all of which are accepted as final by all schools of economists. If, for example, the chemical law of the composition of the atmosphere were other than it is—if, for instance, its oxygen were chemically combined with its nitrogen, as the oxygen in water is combined with its hydrogen—it is incontestible that the laws of organic life in such an atmosphere, including those of the production and distribution of wealth, would be other than they are. But no economist thinks of discussing this law of aerial chemistry.

2. The second orthodox reason for its insistence on the importance, to its science, of this principle is this, that the question involves the whole subject of the causes of poverty in a rich and industrious community. (Mill, *I.c.*, § 1.) It is the niggardliness of nature that is the cause of poverty, here and now. Here again we perceive a certain measure of truth, as follows:—If the constitution of the universe were such that an acre of ground would suffice on which to build the city of London, and to cultivate, at the same time, all of the agricultural products—the wool, and the wheat, and the meat, and all the rest—that its population could consume, the conditions of life would, assuredly, be easier for those people. But does this fact necessarily imply that there would, in such case, be no poverty in London? Of course not. Why, then, swell the importance of this element of cost so far beyond its legitimate proportions, overshadowing—or, rather, putting clean out of sight—all the other factors in the creation of poverty: the defects of individual character, the lack of employment, etc.

Again, if Business Economics is to take cognizance of this principle at all, it must be simply as one among an endless variety of hindrances to the attainment of desirable things without effort. In respect of this subject, it is the general, comprehensive, law of the relation of man's internal character

There are numerous phenomena outside of those connected with the growth-principle in vegetal life, which have a bearing upon this question of nature's preparations for the realization of her scheme of human progress through the satisfaction, successively, of an ascending series of human wants. Especially is this to be noted in the case of the forces which she has, during all these long periods of man's development into the

to his external environment that must be discussed in our practical inquiries, and not this special law of the limitation of profitable expenditure on a given area of land-surface, which is, as just stated, but one of many of its manifestations.

3. But that which, after all, supplies the chief reason for the high place which the "diminishing" principle occupies in the classic Political Economy is the conception which it expounds of this law as a fearful, ever-impending, inexorable, fate, ceaselessly dogging the footsteps of man, and sure, sooner or later, to drag him down into a slough of despond and wretchedness unspeakable. Though typified by one of its chief exponents as a highly-elastic and extensible band whose pressure is felt long before the final limit is reached (Mill, *l.c. ante*), what is really meant is, that the pressure is due to the expansion of the body within. The final murderous pressure, as well as the present lesser constriction, is due to the Law of Population, according to which, "where goods are increased, they are increased that eat them." (Bonar, *Malthus and His Work*, I., 1.) But, as will, it is believed, be satisfactorily established in its proper place (see 229, *infra*), the orthodox conception of that law is founded upon an error of observation of the facts. Those facts are the express reverse of the conclusions thought out by the expounders of the Abstract Economics; and, this being the case, no matter how useful to that science the classic law of population may be in its hypothetical reasoning, it can have no place in our system as a basis for accepting its interpretation of the Law of Diminishing Returns from Land.

capacity to exploit them, kept in store for him—the rapidity of the development of that capacity being the great distinguishing characteristic of the century now drawing to a close: but everything noteworthy as regards this subject will be sufficiently brought to our notice incidentally, in the course of our further investigations. Hence we may allow them to pass without further mention in this place, and we conclude the present division with a final suggestion, as follows:

In the study of the phenomena relating to nature's provision for human progress through the satisfaction of human wants, it is to be borne in mind that our point of view is that of a nation exceptionally advanced in productive power, and consequently having the entire accessible land-surface of the planet for its field of activity, whether in direct exploitation or through exchange.

II.—THE LAWS OF THE INCREASING AND THE DIMINISHING RETURNS FROM THE EXERCISE OF THE HUMAN FACULTIES.

In the case of man himself, as in that of his environment, we readily discover phenomena which indicate tendencies unmistakably favorable to his progress, and other phenomena the evil import of which is equally incontestable. Let us consider these two classes separately.

A.—Increasing Returns from the Human Faculties, Physical and Mental.—There are several different aspects of this subject, viz., as follows:

1. A very striking phenomenon of the individual man in action is this, namely, that the efficiency of his faculties, physical or mental, is enhanced by their normal exercise. Putting aside the abnormal circumstance of over-exertion, man can run longer and faster if he runs much, strikes harder if he strikes much, and think better if he thinks much:—very much longer and faster and harder and better, if these exertions are made with intelligent order and system.

This principle of progress is limited by a familiar law of nature, namely, that of the succession of generations:—the facts of death and birth. The question whether this law does, upon the whole, make for progress or the reverse is one upon which much might be advanced on either side, but it is not one for discussion here. As business economists, we must, as we have just said, take things as they are. But the law of successive generations has this interest for us, that the individual's accumulation of powers is arrested by his inevitable death. This consideration leads up to

2. The phenomenon of the transmission of the results of individual observation and experience, from generation to generation. By this agency, the human race—although it must lose the use of the trained physical powers of its élite individuals when age and death claim their dues—is able, under sufficiently-favoring conditions, to preserve for its advantage the ripened thoughts of those that have passed away: the experiences, the observations, the conceptions, and the speculations of the vanished spirit; the script of the hand that is still. Here we find the basis of that tremendous but hitherto imperfectly utilized

instrumentality of human progress, Education : the joint product of the law of increasing returns from the faculties through their exercise, and the law of the inheritance of acquired knowledge.

It shall be the especial aim of this essay, in the appropriate places, to awaken appreciative attention to this subject. At the present stage of our work we must limit our inquiry to a brief consideration of some of the phases of the progress already achieved by man through the mutually-interacting forces of the progressive accumulation of knowledge in the society, and the progressive development of capacity in the individual.

The most striking among the phenomena relating to this subject is the amazing rapidity with which man's command of nature has progressed in recent times. It reminds one of the aloe, which may require from half a century to a century to make a growth of two or three feet, and may then, all of a sudden, send up a stem of five times that height in a few weeks. To take a single instance, observe for a moment the phenomena of the recent progress in the transmission of thought and the transportation of goods and passengers. A bare half-century has elapsed since the advance in electrical science gave man the telegraph. Scarce a third of a century has passed since the improved methods in metallurgy made feasible the wholesale production of cheap steel, eventuating in the ocean steamers and the railways of the civilized world of to-day. Within the compass of those few years, this latter instrumentality for the control of nature has been reduced in cost to such an extent that twenty-five units of service in railway rails are now obtainable at the

price of one such unit previously. Consider, on the one hand, the years that lapsed while the race was bringing metallurgical science to the point that made possible the use of the costly and shortlived iron rail, and, on the other, the twenty five-fold advance accomplished in the term of a single generation—with all that the change implies for human progress. “Amazing” is a moderate expression, under the circumstances. Material progress seems to have suddenly taken wings. The growth of wealth, *per capita*, in the modern industrial nations in the past half-century—and especially in the later half of this period—as compared with the progress made at any time previous to the opening of this nineteenth century, resembles the bursting out of a long-smoldering conflagration. Reasoning from the known to the unknown, the future is no less full of promise. Taking once more a single example out of many phenomena available for the purpose, the advance from the existing state of chemical knowledge to that which shall give us a cheap and ready way of imitating those processes of nature by which she renders the free nitrogen of the air as readily assimilable by plants as is the combined nitrogen in certain substances, should be, according to every analogy, one soon to be achieved. It taxes the resources of the most fertile imagination to conceive the results to human progress, of such a discovery.

But if the facts in the recent past, and the probabilities even now in sight in the near future, in respect of physical results, are encouraging to the seeker after methods of quickening the pace of progress, how much more so are the possibilities that lie within the spiritual, as compared with the material, aspects of this question?

Suppose that, out of the stir and turmoil of this period of agitation, unrest, and blind groping in all directions, there should be evolved a truly scientific Philosophy of Human Progress; a symmetrical, all-harmonizing, all-explaining System, a worldly-wise advising science, a shrewd interpreter of the significance of the facts of man's past experience, to take him by the hand, and, leading him to the heights of knowledge, point the way. The thought of it stirs the blood as when, in the mind's eye, we see bewildered Israel emerging from the wilderness and from Pisgah's top surveying the suddenly-revealed Land of the Promise. Surely there is some reason on the side of the optimist—made such by the contemplation of the material progress won by system applied to material things—when he endeavors through a search for the things overlooked heretofore, to discover this priceless treasure.

3. Another pertinent phenomenon has not heretofore received the degree of attention to which its importance would seem to entitle it. It is this:

The law of physical and mental inertia would seem at first blush to be a principle wholly opposed to every movement toward progress; but, to the business-like empiricist, certain of the phenomena of real life put it in the light of a valuable auxiliary, a very helper of man in his upward strivings. The propensity to do things in the easiest possible way eventuates in the doing of things in the best possible way. We can appreciate this factor in progress at its true value when we realize the fact that the permanent practice and hence the existing development of such vital steps as the joint evolution of the institutions of the Division of Labor

and of Exchange, and the substitution of purchase and sale in Money, for Barter, are easily recognized as the legitimate results of this instinctive seizing and retaining of methods that follow a line of lesser resistance. And these are simply manifestations of the general underlying principle that when, under the superior pressure of some motive to action, a new and better way of reaching some end is hit upon, the *vis inertiae* steps in to cause the improved system to take root, and spread, and fructify.

4. The principle of human inertia has also a field of action as a promotor of progress quite outside of its function of preserver and disseminator of better methods. We discover this when it appears as the auxiliary to caution, reinforcing its conservative tendencies. It is plain that, to a certain degree and with persons of a certain temperament, it is a fortunate circumstance that the spirit of circumspection, whether in the formation of opinions or the putting of them into practice, should find support in a disposition that ballasts mercury's heel-wings with soles of lead. The tendencies toward a too-facile adoption of new suggestions is an enemy ever lurking in the path of progress ; and a mischievous one he has often proved to be. It is but right, therefore, that we should recognize the value of the services of that quality in the human constitution which tends to obviate this danger.

5. There remains yet another principle of increasing returns from the human faculties, namely, that which underlies the System of Associated Effort. We shall have occasion hereinafter to note (see page 219, *infra*) the manifestations of the operation of this law in ways that will convince us of the large part it plays in the

mechanism of progress ; for the present we have to deal with its more general aspects only. These belong to two separate categories, to wit., (1) the physical, and (2) the psychological, realm. In its physical relations it appears in the proposition that, under certain conditions, ten men acting in concert—as in pulling at a rope—can effect in a single effort what one man acting alone could not effect in ten, nor in any other number of successive efforts. In the realm of psychology it is discoverable in the inspiration derived from the contagion of sentiment and its intensification among an assemblage of individuals animated by a common purpose : in the resolute unanimity of the elbow-to-elbow charge of a line of infantry : in the superior vim and force of any united movement—the spirit of the weakest individual participant becoming more resolute than that of the strongest member, as the latter would be in the absence of the association-stimulant.

6. A potent influence for progress is also to be found in the reaction of Character on Environment, and of Environment upon Character. In the department of our work devoted to the phenomena of Character we shall be brought into contact with manifestations of this principle which will convince us that in this law of interacting, mutually-developing, forces there inheres a power, competent, under favoring conditions, to provide a succession of ascending steps without visible limit.

B.—Diminishing Returns from the Human Faculties.

—Here again we find that our subject presents itself in a variety of aspects, as follows :

1. The principle of human inertia affords a fresh illustration of a fact already alluded to in connexion

with the subject of Selfishness, namely, that there are certain qualities in human nature which develop into forces favorable or unfavorable to human progress according to circumstances. The Love of Ease which we have just observed in the rôle of a promotor of progress must now be recognized as the chief underlying cause of the phenomena of human retrogression which obtrude themselves on our most superficial observation. Where the circumstances of the environment combine with the inborn propensities of the individuals of a community to slacken the pressure of the higher desires and aspirations, the suggestions of sloth come in to reinforce the backward pull.

2. We recognize another evil rôle of this principle of inertia when it appears as an auxiliary to pride of opinion and the unscientific lookout for consequences, which the history of human progress sometimes exhibits as conspirators against the acceptance of unwelcome truths. This, be it observed, is no trifling matter. We have already had occasion to note how every civilized nation exhibits the phenomenon of a select body of individuals who, by virtue of their intellectual eminence, have secured the confidence of the community at large to such an extent that the great bulk of the latter habitually look up to this cultured *corps d'élite* for guidance: do, practically, let out to it the contract to do their thinking for them. It is true that there may exist within this body all manner of differences in doctrine, yet this simply amounts to the fact that different thought-leaders control different "schools," parties, sects, what not; and the cardinal truth remains that, so far as concerns the fundamental principles of any system, belief, practice, the brain work is for the most

part turned over by the ordinary many to the intellectually-eminent few. Anything, therefore, which tends to influence the reasoning of these instructors of the masses, by imparting additional force to the suggestions of dogged self-sufficiency and pride of opinion, or of the fear of inconvenient results, must be regarded as seriously mischievous. It is a poison injected into the brain of the body politic.

Taking now—as previously in the case of the raw materials of production—a comprehensive view of the entire subject of nature's provision for progress as regards the human faculties, we conclude now as then that the capacity for indefinite development in respect of this factor indicated by the facts of human experience, promises to be ample for all the requirements of the case; and again, reasoning as before from the point of view of an advanced modern nation inquiring respecting the prospects of an adequate supply of labor for its expanding industries, that this question takes care of itself when we conceive of the external world as constituting a practically-inexhaustible store of humanity, from which to draw *ad libitum*.

III.—NATURE'S PROVISION OF AN AUXILIARY TO HUMAN EFFORT.

In the two preceding divisions of this Section, we have studied certain of the phenomena connected with nature's methods—directly, or through human agency—of providing for the satisfaction of wants. We have now to note another body of phenomena, namely, those relating to another provision to the same end.

We have seen, in the earlier part of our inquiry, that the result of the impact of the human faculties upon suitable materials is Wealth. Now one of the uses of wealth is its exploitation, in connexion with Nature and Man, as a factor in wealth-generation. It is in this form—that is, as an auxiliary to man in production—that it finds a place here. To Nature and Man we add as third, a joint product of the two, to wit., Capital. Let us now give our attention to certain phenomena which justify this association.

It will be developed later in the course of our more detailed investigations, that in that primitive form of industry in which demander, producer, and consumer are united in one personality, the results are so restricted as regards the number and variety of the wants satisfied, that, in the absence of anything more efficient, human progress must be arrested at a comparatively early stage in its development; and that, so far as human experience thus far goes, the satisfaction of wants on the scale requisite for the evolution of a high order of civilization has been accomplished only through one or other of the more complex forms of industrial organization which we include in the comprehensive term, “Capitalistic Production”: in which the one essential feature common to all the forms is the fact that under them the *fons et origo* of the want-satisfying wealth evolved, is the capital and the management that goes with it (to constitute “Capital” as we employ the capitalized word); the human faculties employed in the operation under the designation of “labor” being in no sense *contributory* otherwise than the fuel, the water-power, or any other indispensable requisite of the operation is contributory: that is to say, the labor employed

has no more part than these in *the causing* of the productive act :—which is the essential point. (See page 439, *infra*.) Observe, then, with what ingenious simplicity natural law provides the requisite supply of this essential prerequisite of large-scale want-satisfaction. The problem in this case, we have just seen, is to insure, not merely the existence of the wealth required, but also its co-existence with management:—in other words, to provide an adequate supply of Capital. This problem it solves by making wealth the reward of management. It gravitates into the possession of management, in obedience to the laws of its own being. Management backed by “means” obtains the wealth from nature; and, through the ~~stitution~~ of Private Property, retains that part of it which remains after extinguishing the claims of those who had supplied any of the requisites of the wealth-generating operation; to wit, (1) the objects operated on, and (2) the use of the human faculties impressing upon those objects the changes which had transformed them from raw material to finished product. By this simple, self-regulating, process of natural selection, the means and the management are brought together. This admirable provision is obscured by the circumstance that there are two ways of acquiring wealth beside that already excluded from the present discussion (viz, the case of production out of the producer's own resources and for the producer's own consumption). These are (1) the winning from Nature through Capitalistic Production, and (2) the winning from Man. Through the latter operation a vast amount of wealth passes into the possession of those who have not won it from Nature. These are cases of the transfer from individual to individual of

wealth already won from Nature, and success in this form of wealth-acquisition may be the result of qualities in the acquisitor which are not specially valuable in productive enterprise, although as a rule they indicate capacity for good management in anything which their possessor undertakes. Where the possession of the means of capitalizing industry is due to mere accident, whether of inheritance, an "unearned increment," or the like, the workings of natural law will, as a rule, make those means available for capitalistic production through one or other of two methods, as follows:—The possessor will be either competent or incompetent. If incompetent, he will either lend them to others to employ thus, or will attempt it himself, and through his mismanagement the means will pass into the possession of others competent to employ them successfully. The above remarks, it will be observed, ignore the wealth not used as capital:—that is, as an agency in the production of new wealth. They are to be understood, therefore, as intended to be applied only to so much of the wealth developed by the industry of a society as is dedicated to productive enterprise. This leads up to the subject of nature's method of securing this dedication.

This object is obtained through a law of the human constitution, in obedience to which men are impelled, under certain conditions, to prefer a larger good in the future to a smaller good to be secured by the present consumption of the wealth.

Such, if we have rightly interpreted the significance of the related phenomena, is the provision made by natural law for the prime requisite in the purveying of the means of Comfort on a scale adequate for the

great modern movement in civilization and progress—Capital.

In conclusion, asking, as in the former cases, the question of the adequacy of the supply of Capital for the requirements of production in an advanced modern nation, we find the subject of such vital importance to the chief business-problems of both social and economic science that it would be mere useless repetition to give it special separate treatment here, and will content ourselves with the assertion that the sufficiency of the supply, under certain conditions, is conclusively established. (See, *inter alia.*, page 292, *infra.*)

IV.—THE DEMAND FOR THE MEANS OF COMFORT.

The discussion of the resources at the command of man would be incomplete without some allusion to the question of the extent of the demand for, as well as of the supply of, the means of Comfort. No matter how large the increase of the food-supply, if the increase of the food-consumers be proportionately larger, the arrest of human progress is a mere question of time. Under such circumstances, that result is inevitable. We find ourselves here, therefore, in the presence of a vital question.

Fortunately, it is a simple question of fact, and therefore fully within the scope of our positive science. It is also a thoroughly business matter, and hence demands no daring flights of speculative suggestion, no recondite delving into the remote recesses of the consciousness:—nothing, in fact, beyond plain common-sense insight into the significance of the results of a series of practical experiments carried on wherever the race has found a foothold, and throughout all the

known ages of man's presence on the planet. Nor are the phenomena of the case discouragingly complex to the systematic observer whose training has been in the analysis of facts rather than in speculation upon ideas. The results in question may be thus stated :

In those classes of the population of civilized nations in which destitution reaches a degree inducing recklessness, the birth-rate is frequently so high that a community made up entirely of these classes would tend toward rapidly breeding itself into starvation. Neglecting, as is proper, occasional instances to the contrary, limited in extent and in duration, the result of temporary conjunctions of exceptional conditions, it can be confidently asserted that in no other civilized class anywhere does the increase in numbers tend to interfere, nearly or remotely, with the welfare of the community. In no civilized nation of the world, now or heretofore, so far as we have any knowledge, has the growth of the thrifty, self-controlling, prosperous, part of the nation ever given the slightest cause for uneasiness, or the least suggestion of a menace to the prosperity, either of itself or of the nation of which it was a part.

So great is the complexity with which this subject has been surrounded, that it is freely acknowledged by the authoritative champions of the classic Political Economy that, though fundamental to the science, this question of the Law of Population is still unsettled,—must still be regarded as an open one. (Cairnes, *Logical Method*, I., 1.) But the complexity is due more to the treatment than to the subject itself. Intrinsically, it much resembles a large category of cases which those who have to deal with them accord-

ing to business methods find little trouble in mastering: cases, to wit., in which a certain proposition is true under certain conditions, the reverse true under certain other conditions. Iron, at a certain temperature, welds easily. Cold iron will not weld, except under certain extraordinary circumstances. Water, at a temperature below the centigrade zero, is a solid: at any higher degree of heat, a fluid, a vapor, or a gas. Yet these are but the rough outlines of the facts. The welding-temperature of iron is altered considerably by the combination with it of certain other bodies; the same is true as regards the freezing-point of water. But these modifications of the general laws in question present no serious difficulties, either in theory or in practice. The phenomena of the pressure of population upon subsistence are rather more complicated, but, as we have said, not discouragingly so, when treated according to positive methods. Taken "by and large," the rough outlines of the fact that the overbreeding will take place below a certain level of physical comfort and not above it, stand forth as unmistakably as the laws of the welding of iron or the freezing of water; but there are certain disturbing influences in the former case less easily recognized than the effect of the presence of phosphorus or sulphur on the welding of the metal, or that of salt on the solidification of the fluid.

In the first place, iron-nature or water-nature is, *per se*, a constant: human nature is a variable. Thus, even in the case of a single individual, he may be prone to do to-day what he would not do yesterday, though every condition of external environment remains the same. Here, then, we have a sufficient cause of perplexing variation in the phenomena. But this is the

least part of the difficulty. For the purposes of our investigations, we must study, not the phenomena of individual life, but those of a great aggregation of individuals, each exhibiting one form or another of breeding tendency, from the most reckless in spirit and procreant in body, through every imaginable combination, up to the opposite extreme. It is manifest that a case like this calls for a keener insight, a more patient and diligent study, than those, such as above cited, in which we have to deal with less complex and unstable phenomena. But though a more painstaking and clear-witted inquiry is demanded, the nature of the case is such that the results, when the necessary conditions are properly met on the part of the investigator, are none the less trustworthy. Once that the hypothesis of a division-line between the positive and the negative of the over-breeding tendency, drawn at a certain degree of comfort, is set up as the organizing principle on which to range in order all the phenomena of human society relating to the population-question, all becomes clear : the confirmation of the hypothesis is complete.*

* With the exception of the great fundamental doctrine of the classic Political Economy, namely, the Limitation of Production by Capital, there is probably no widely-accepted principle which displays the insensibility of abstract reasoners to the virtues of verification as does the classic Law of Population. From a purely business point of view it seems incredible that a succession of eminent thinkers, specially devoted to the study of natural law with a view to determining its great leading principles so far as may be useful for the instruction of the statesman and the philanthropist, should have adopted the course pursued by them in this instance. For, to the business sense, the situation here may be described thus :

The phenomena connected with the subject leave no room

*Section Second.—THE LAW OF THE DEVELOPMENT OF
HUMAN PROGRESS THROUGH THE DOMESTIC
AND SOCIAL ENVIRONMENTS.*

Having now considered the phenomena which indicate—if we may be allowed the expression—the attitude of Nature, human and non-human, toward the scheme of human progress through the evolution of

for doubt that, according to the laws of man's being, there exist (1) a propensity whose force, undisturbed by opposing influences, would cause an inordinate increase of the species; and (2) influences that do, under certain conditions, disturb the action of that law. Otherwise stated, we have in this instance a case in which there are forces making for, and other forces making against, a certain movement. The next thing in order, then, is to ascertain which of these contending influences prevails over the other; and if it is found that this is a question of circumstance—that the positive sometimes prevails, the negative at others—the next step must be to determine the conditions which control this preponderance, as indicated by the concrete experience of mankind. Until the inquirer has equipped himself with this knowledge of the practical working of the contending forces, he has no data for his reasoning on the subject, and his conclusions have no title to consideration.

This would seem to be a perfectly fair presentment of the case, whether viewed from the position of the empirical philosopher, or that of the business man. But if this be the case, how shall our metaphysical inquirers justify their course in simply assuming that the positive force is to be regarded as the preponderant one? If they kept within the bounds of the Abstract, and presented to us a mere hypothetical conclusion, true only under stated conditions, they would, in the present instance, get no further than a truism. They tell us nothing, give us no information, when they say, "If the positive force is predominant, it will predominate." But they undertake to give information, and that of a very important character, when they say:

human wants, it is in order for us to take up the subject of the institutions which have been evolved out of the interaction of natural laws, and, as before, inquire what human experience has to teach us respecting the adaptation of these to that scheme. The discussion of the greater part of these institutions can better be deferred to a later stage in these investigations, in order that our attention may for the present be directed exclusively to such as are especially fundamental in character ; supplying, in fact, the basis for all the subsequent developments. We have reference here to The Family and The Nation. Let us therefore take these up in turn, and inquire as to the relations of each to the scheme of progress according to our hypothesis.

1. The Family. The most conspicuous function of the family is that of supplying the arena for the interaction of those motives which nature has implanted in man with a view to carrying the individual safely over the period of helpless dependence, as already explained (see page 198, *supra*) by the illustration drawn from the tiger-species. The problem of Comfort is thus solved for the dependent individual, and that of character-development partially met as regards both the givers

“ Since the positive force is predominant under prosperity, prosperity involves its own inevitable destruction.”

Surely it is high time that we find a substitute for a system which is capable of such confusion of thought in dealing with problems of concrete existence, as to mistake, as here, a wholly unverified assumption for an ascertained fact.

In view of what had already been presented upon this last topic, it may seem like needless iteration thus to recur to it once more, but the point is one of such vital concern that any evidences of over-anxiety respecting it will, it is hoped, be regarded leniently.

and the receivers of benefits, through the results of the domestic ties. This is an old theme, and need not detain us at this time longer than simply to call attention to the manner in which everything harmonizes with our Want-Hypothesis; especially that function of the domestic relations which consists in the preparation of the individual for membership in that highest exemplification of the Principle of Association, to wit.,

2. The Nation. It requires no profound or protracted research to discover the *raison d'être* of the nation as an instrumentality in the progress of the race at large. The phenomena of human experience connected with this question supply evidence illimitable, unquestionable, that the civic relation is the chief agency through which the evolution of civilization is effected. Having reached this point of view, we have no difficulty in formulating a co-ordinating concept of the relation of the nation to the scheme of human progress. The plan of nature is to secure the elevation of the race, not *per saltum*, that is, by operating upon the entire mass of humanity simultaneously, diffusing the elevating and refining influences equally throughout the body, as a leaven mingled uniformly through a batch of dough ; but, *per gradus*, that is, by first concentrating the developing forces upon a social organization, limited in numbers and within definite boundaries, wherein civilization may be cultivated on the same principles which—arrived at through a blind empiricism—enable men to cultivate successfully a crop of grain. And what are these? Broadly considered, they are very simple. The first is Segregation. The artificial crop is defended from the inroads of the natural growth which would otherwise crowd it out of existence. The

second is Association. By the assemblage of the available favoring conditions within limits which give opportunities for the development of interaction among them, a system of mutually-supporting movements is evolved, whereby the movement A develops the movement B, which reacts upon and enhances the movement A ; and so on with C, D, etc. Then the advanced condition thus attained in the segregated society spreads by a natural contagion, as it were, into the less advanced peoples, imparting that which not impoverisheth it, and makes them rich indeed. And, according to our usual experience, the possession of this co-ordinating concept enables us to reach a clear and feasible practical precept of action, as follows :—Should there occur a case of apparent diversity of interest as between the nation and the race at large, the scientific method of promoting the interests of the race will consist in giving the interests of the nation the preference.* With these suggestions concerning the primary question, namely, the relation of the nation to the scheme of human progress as a whole,† we pass to the secondary

* This rule, though of the first importance while the Pre-Systematic period continues to prevail, will eventually be made of no effect by the recognition of the fact that the interests of the race are so bound up with the interests of the pioneer systematic nation or nations, that there can not arise a conjunction of circumstances under which there could obtain a diversity of interests as between the two.

† “It is an immense step in human progress when a set of barbarous tribes unite to form a nation. Under the strong hand of some chief, or under the pressure of some great necessity, they give up the isolation which is both the weakness and the strength of the tribal state of society, they choose some strong place for their centre, they submit to a common govern-

question, to wit, the relation of the nation to the scheme of wealth-generation though the cycle of movements described in our theory of the subject. (See pages 184-235, *supra*).

We have already reached the formulation of the general rule of action here, to the effect that we should endeavor, so far as the circumstances of each concrete case will permit, to supply the favoring conditions and to minimize the disturbing influences. The present question therefore is, "In what way can we employ the nation as an instrumentality for carrying out this injunction? what are the requirements for the free and unconstrained play of the natural forces underlying the cyclic movements in question?"

1st. The prime and absolutely-indispensable requisite is the Preservation of Order. There must be immunity (1) from the invasion of a foreign foe, whose cupidity might be roused by the spectacle of accumulated wealth and the unfitness of its possessors for the hardships and horrors of warfare, engendered by a life of peaceful, inaggressive, industry and habits of sympathy with the ills of others; and (2) from the

ment, and while still remembering their tribal traditions and usages, they learn to act as members of a greater community than a tribe. This is the beginning of civilization proper. Law takes the place of custom; the state undertakes to punish crime, and private vengeance is discouraged; the state also undertakes the protection of the weak, so that humane sentiment appears, and a security is engendered in which the arts and sciences spring up and flourish."—*History of Religion*, pp. 79, 80.

"But while these general movements of the human mind may be acknowledged, the education of the human race proceeds for the most part in nations."—*Idem*, page 430.

invasion of the lawless among those of their own community.

2d. Another requisite is General Education. There must be a development of intelligence to a degree which shall enable each individual adequately to fill the rôles of producer and consumer. For the proper working of the industrial cycle, the faculties of the producer must be exercised with intelligence, and the wants of the consumer varied in kind and elevated in character to an extent possible only in those of a somewhat-advanced intellectual development.

3d. There must be that combination of the principles of Association and Segregation without which the co-ordination of functions requisite for the systematic realization of the wealth-generating cycle can not be secured. As we here find ourselves on unexplored ground, we must be content to advance cautiously, making sure of our position at each step. Let us pause, therefore, to get a firm grasp upon a certain principle of reciprocity—of mutual action and reaction among the movements—which we must clearly apprehend before we can rightly comprehend the nature of the cycle which they compose.

An ideally-perfect realization of the wealth-generating cycle would be presented by a case such as the following :—A, B, and C and their several families constitute a community dealing exclusively among themselves. A produces more when B and C demand more ; B produces more when A and C demand more ; and C produces more when A and B demand more. A, B, and C severally consume more when they have produced more, and, for the same reason, have left over more wherewith to vitalize (furnish the physical basis

for) more demand of each on the other two. The growth-principle normally inherent in the productive operation (see page 183, *supra*), the conditions being normal, will insure this "more" of demanding, producing, consuming and demanding again, and natural law will have its perfect work. We will next suppose that D is brought into the association ; D being the producer of a product different from those of A, B, and C, each of whom produces one different from those produced by the rest ; so that A, B, and C each had a choice between two products beside his own, and now A, B, C, and D, each of them has three kinds of objects of consumption beside his own, wherewith to satisfy his wants. But after some time D, let us say, instead of directing his demand upon the products of A, B, and C, any or all of them, sends it outside of the association. To the extent, therefore, of D's demand, the cycle is broken. The producing and the consuming and demanding consequent thereon of A, B, and C are diminished by this change to the extent of D's demanding. Thus it becomes manifest that, for the ideal perfection of the wealth-generating process, there must be no diversion of the demand of any member of the scientifically-organized association from its vitalizing action on the productive powers thereof. But under the operation of the principle of *laissez faire*, such direction of the demand is not to be counted upon : on the contrary—as will be unmistakably established in the course of our investigations relating to Cost of Production (see page 323, *infra*)—the natural laws of human motive make it certain that, in the absence of positive interference, members will often send their demand radiating off into space, as it were, instead of

being intercepted and reflected back into the proper focus of its activity. In proportion as such diversion is practiced, the natural chain of successive movements is ruptured, and the wealth-generating operation arrested. What is requisite, therefore, is a pressure upon each individual member, such as shall compel the proper direction of his demand.

Now, how is this essential, this imperatively necessary, requirement for the assured maintenance of the ideal cycle to be met? There is no other agency conceivable, save that of the Nation. Segregation there must be, so that there shall be such limitations imposed on the dimensions of the cycle that its vital principle, Reciprocity, shall have full action. This reciprocity can reach the requisite development only within an association homogeneous and compact enough for the management of its business affairs by a single Government. Aggregation there must be, for several reasons, to wit., (1) in order, that the variety of products may be such as will satisfy the requirements of the law of the evolution of wants; (2) so that the great principle of Associated Effort may be brought into play, making feasible (a) the application of the principle of the Association of Specialized Functions,* and securing the

* Ever since the publication of the *Wealth of Nations* the classic Political Economy has made a leading feature of "the Division of Labor"; dwelling upon the remarkable results achieved by that "division" in such cases as that of the manufacture of pins, in which twenty workmen associated for the production of a pin from the wire, each confining himself to a single step in the process, can turn out perhaps many hundredfold more pins than could the same twenty if each of them carried through the entire process alone. But in point of fact, as shown by Frederick List, in his *National Economy*, this

advantages of production on the grand scale (see page 395, *infra*) ; and (b) rendering feasible the realization in practice of the round of movements which constitute systematic wealth-generation.

By means of the Nation, then,—its will expressed and enforced through the legislative and executive action of its Government—the direction of the demand of its individual consuming members can be secured by an exceedingly simple and effective process, thoroughly scientific empirically, because based upon pure love of personal gain, sanctioned by enlightened public opinion as patriotic, approved by the sense of duty to neighbor and country, and grateful to the altruistic impulse to do that which is most serviceable to others. This process consists in making the home product cheaper to the consumer-nation than the foreign-produced equivalent. (See page 392, *infra*.)

But a moment's reflection convinces us that there must be cases in which this line of public policy can avail but little for its great primary object, the promotion of progress, so long as the way is left open for the

division of labor, although an indispensable pre-requisite of the improved method, is not the *vera causa*, the true creative element, therein. The division—that is to say, the assignment of a special function to each one of a body of co-ordinating operators—is simply a preparation of the several actors for the special rôles which they are severally to assume: the action takes place as the result of the systematic association of these rôles.

To the non-empirical mind this may seem to be mere haggling over forms of expression. But even the most metaphysical should recognize the value of precision in expression. Whatever makes for clearness of conception is worth insisting on.

free working of the fundamental, all-pervading, natural law of the gravitation of labor to the most advantageous employment. It is manifest that if a single one among the group of modern intertrading nations should reach the Systematic stage of civilization and hence proceed to establish with scientific method the wealth-generating cycle, thus maintaining a supply of Employment constantly in excess of the demand for it by the labor of that country, the remuneration of labor therein must be enhanced beyond that prevailing in the Non-Systematic countries. It is equally plain that, in such a condition of things, the modern facilities for travel and traffic will be availed of by the less prosperous laborers of those countries to enter into a competition with the beneficiaries of the Systematic system that must greatly derange the working of the industrial cycle and mar its legitimate results. What, indeed, could be more unscientific, from an empirical point of view, than to leave unchecked a movement which must result in keeping the great body of the individuals within the bounds of the attempted industrial organization, down to a command of means so limited as to forbid the satisfaction of any but the lowest order of wants? Incontestibly, it would signify the arrest of the cyclic movement in proportion to the degree to which the foreign competition would be developed. The imperative necessity, therefore, of some restraint upon this hostile influence is indisputable. Here, as in the case just considered, there is no adequate agency conceivable, other than that of the nation. But all difficulties vanish when that agency is invoked. Then, the supply of employment being constantly in excess of the demand, the intelligent and skilled native labor

will seek the more elevated and more remunerative kinds of work, and the lack of labor for the higher grades can be made up by the regulated admission abroad of those to whom the change would mean progress.*

We see, therefore, that there is nothing fortuitous in the association of the terms "civic" and "civilization"; that, on the contrary, they constitute a causal mutual cause and effect: that the agency of the nation in making feasible (1) the peaceful pursuit of production in industry; (2) the general diffusion of intelligence throughout its population; and (3) the realization

* Such "intermeddling" will be heresy, rank and damnable in the eyes of the classic political economists. But *laissez faire*, aside from the fact of owing its existence to utter neglect of the phenomena of wealth-generation, is based upon two distinct fallacies, as follows:

1. The notion—a survival of eighteenth-century Rousseauism—that primitive nature presented the ideal condition, the rule to which should be the aim of a truly philosophic society. But it is time, surely, that these philosophers should wake to those results of empirical research which show that, when in woods the noble savage ran, that lively movement not seen consisted in the running either *before* or *after* another noble savage.

2. A confusion of ideas which makes "natural" and "artificial" tantamount to "earlier" and "later" natural developments. Take for example the case of egoism, which is ruthless, there altruistic. One is as "natural" as the other. Human nature is a part of nature. The true antithesis between "scientific" as being accordant with, and "unscientific" in defiance of, natural law. Civilization is as "natural" as savagery. But the classic Political Economy objects to "artificial" interference with the natural laws of trade,—a house, a plough, a petticoat, were not "artificial."

the ideal of the wealth-generating cycle, justify us in regarding that institution—irrespective of every other consideration—as an indispensable prerequisite of human progress beyond a very primitive type.

If now we compare our precept of concrete action as formulated above (see page 170, *supra*), to wit., “Satisfy the existing wants and give knowledge of others of a higher order, and natural law will complete the work”—if we compare this with what we have just learned respecting the functions of the Nation as a factor in human progress, we arrive at an important conclusion as regards the plan of our treatise. We perceive that we shall add greatly to the effectiveness of the work if, when we come to questions of practical detail, we confine our investigations exclusively to subjects connected with the action of the Nation for the promotion of progress; we shall thereby give it directness and simplicity without slighting any questions of practical moment:—every problem relating to the action of the individual, *per se*, or of the race at large, being easy of solution in the light of the conclusions we shall reach respecting the systematic action of the nation. It will be understood, therefore, that, from the point indicated above, our inquiries will bear reference exclusively to the business aspects of the question of employing the powers of the nation-organization for the furtherance of the progress of the race.

There yet remains to be considered an aspect of the Nation as an instrumentality for progress which, to a certain extent, belongs to the question of the nation's function as an Educator, but which has other features which must not be left wholly unnoticed. The influence of the nation on the individual member there-

of in respect of the Environment which it provides for him has been thus far treated with a view almost exclusively directed to questions of an economic nature; in other words, to the opportunities which it affords as regards Comfort. But these would signify nothing—absolutely nothing—in the absence of what the nation does for the individual in the way of fitting him to make use of those opportunities. When we come to the question of what the individual *is*, and how much of this he derives from the influences purveyed by the nation of which he is a member,—we speak here of that great body of the population not subject to the influences of foreign travel—we are amazed at the slight attention which economic and social science has given to the subject. It is indeed a matter of great moment, but the phenomena available are so plain in their significance that we can put into a few lines data sufficient to set the whole subject in its true light.

Avoiding those examples in which social differences would cause the influences of heredity to disturb too greatly the working of the forces of environment, let us take the case of a half-dozen children born of parents belonging to some European nation, each of whom shall, from earliest infancy, be reared in a family native to and living in some other European country,—one each, say, in Russia, Germany, Sweden, France, Italy, England. What will be the result? In all but their physical characteristics, we shall have in these individuals at middle age, a Russian, a German, a Swede, a Frenchman, an Italian, and an Englishman. The influences of national environment will have proved themselves immeasurably stronger than all others combined. All human experience tells the same story.

The more the facts are pondered the more complete is the conviction that it is scarcely an exaggeration to say that what the tree is to the leaf, that the nation is to the individual. This truth will become more and more obvious, and its significance be more and more appreciated, as we from time to time, in the course of our researches, catch fresh glimpses of the influence which that form of social organization exerts upon the fortunes and the sentiments of its members.

**Section Third.—INDUSTRIAL ORGANIZATION AS A
FACTOR IN THE NATURAL SCHEME OF
HUMAN PROGRESS.**

We have now brought the study of the institutions evolved out of the laws of nature, human and non-human, considered in respect of their bearing on human progress, down to the close of the discussion of those of a fundamental and universal character common to all human society above the savage; to wit., the Domestic and the National. We have found that the phenomena thus brought under our observation unite in concordant testimony to the correctness of our theory of the scheme of nature for the development of progress. The conclusion seems unavoidable that, if we have omitted nothing essential, the whole of the related facts range themselves in systematic order under that generalization. They unite in one systematical explanation of the phenomena of progress, as far as they go, and they go so far as to create a strong presumption in favor of the expectation that a further prosecution of inquiry upon the same lines will yield accordant results. To this

latter work we now address ourselves, concluding this department of our Essay with an investigation of the phenomena of that industrial organization under which the remarkable material progress of the present century has been achieved—the institution of Capitalistic Production.

The number, variety, and complexity of the phenomena which present themselves here are such as to compel us to confine ourselves in this place to the conclusions worked out in the next succeeding Book (IV.), devoted to the Theory of Wealth. The present Book, being limited to a presentment of the chief hypothesis and the evidences in support thereof, its main purpose would be obscured by the multiplicity of the details which must be presented were we to undertake to establish each point as suggested. In the interest, therefore, of simplicity and clearness, we shall simply set forth at present the points developed which bear upon that hypothesis, to be accepted provisionally for the purpose of rounding out the exposition; the proviso in each case being that the point—unless sufficiently obvious to require nothing beyond its suggestion—is to be made good in due course. With this explanation, we proceed :

i. The first phenomenon to arrest our attention is the fact that the organization of industry according to the capitalistic system is not an intentional, conscious, convention, but a natural growth, from an earliest beginning to an arrangement by which Capital, for its own purposes, exploits Labor by compulsion, up to a culmination in which Capital, for its own purposes, exploits Labor, and Labor, for its own purposes, exploits Capital. It is a purely-natural phenomenon, the result

of the mutual interaction of the natural laws of man's being, conditioned by varying circumstances of physical environment.

2. Nature, after her accustomed fashion, as revealed to us in our past investigations, secures the execution of her object, the productive operation, by making primitive Egoism, Egoism in its most effective and trustworthy form, to be the motor-force behind the movement. In primitive capitalistic production, the greed of the master impelled him to organize the industry and to compel the exercise of the slave's faculties. Under the wages-system, the same incitement decides the employer to undertake the enterprise, and the employee to contribute the use of his faculties. Thus so long as man remains human, that is to say, so long as the capitalist seeks gain and the laborer seeks comfort, the cyclic movement has its motor-force assuredly provided.

3. In order that there may be efficiency in productive effort (with consequent results in respect of Comfort), but more especially in order that there may be development of a higher order of Character, it is necessary that there should be mutual good-will and friendly accord between Capital and Labor. What, then, is nature's scheme for bringing about this consummation, through the instrumentality of the capitalistic system?

In accordance with her methods in other cases already brought to our notice, she employs a force whose earlier manifestations bear a significance the express opposite of those which crown its final evolution. The slave under the lash is not conscious of a heightened regard for the interest of his master. Nor

is the evolution an altogether rapid one. The worthy mechanic, out of work because of the stagnation of trade, dragging his weary steps homeward after a day spent in a fruitless search of employment, faint with hunger himself and agonized with the thought of the yet hungrier wife and little ones to whom he must presently break once again the dreadful news, whose gaze rests for a moment upon a chubby child, all laces and curls, stuffing with bon-bons a bloated pug, can not pass on with good opinion of the social and industrial adjustments of the period. It is only when we contemplate the condition of things under the arrangements of the Systematic Epoch that we can gain a view sufficiently comprehensive to enable us properly to reason of this matter. Let us therefore assume for the time that we have already in concrete existence one systematized social organization, one nation, whose general population has been educated up to the acceptance, as established principles, of those conclusions to which our further researches on the lines already practiced will lead us, and we shall find the following condition of things :

A.—FOR THE MODERATION OF THE CLAIMS OF LABOR.

a. Instead of the conclusion arrived at by metaphysical methods, to wit., that in every case and under all circumstances, Labor is, in final analysis, the sole creator of wealth, our empirical method reveals to us a vital distinction, as regards this very point, between the small-scale production in which demander, producer, and consumer are embodied in a single personality, and the grand-scale production according to the Capitalistic system. For whereas the metaphysical

position is true, in a certain sense, in respect of the small-scale, the reverse obtains in the case of the grand-scale, wealth-generation, in which Capital is the sole and only originating force in the production of wealth :—systematically setting to work to plan and execute the combinations of natural materials and forces with the action of human faculties, out of which the new body of wealth emerges into being as a constituent part of the nation's resources : the Labor employed in the operation sustaining no other rôle than that of the purveyor of one class of the indispensable ingredients of the combination, precisely as the coal-formation contributes another such requisite in the shape of fuel for generating the mechanical force employed. (See page 439, *infra*.)

b. Instead of the metaphysical conception that "Labor" should receive from the employer whose business it is to turn partially-prepared materials into finished goods, the whole amount contributed by "Labor" to the entire series of operations which transformed the original natural objects into the completed merchantable commodity, our business-like empirical view of the case justifies the existing system under which the employer in each separate step of production extinguishes the title of Labor in so far as concerns *his* operations, by paying to each and all of the individual laborers the covenanted price of their services ; thus transmuting those services—now embodied in the product—from Labor's labor to Capital's labor : this product being sold by him to the capitalist-employer in the next succeeding step in the general process, who in turn makes a full and final settlement with Labor so far as it has any claims on *him*. (See

page 439, *infra*.) Thus is swept away at one stroke the entire foundation of that most deplorable, most pestilent, misapprehension which supplies the so-called "scientific" basis of the Gospel of Hate so fervidly proclaimed by misguided philanthropy,—that foul fiend's own ferment which vitriolizes the milk of human kindness in so many ingenuous bosoms.

B.—FOR THE RECONCILIATION OF LABOR WITH THE
GAINS OF CAPITAL.

a. The remuneration of Capital. In capitalistic production, the wealth out of which Capital receives its profits and Labor its wages is—every cent of it—won from nature, and that by Capital alone, as indicated above. [Capital alone, because the essential thing is the installation and the conducting of the productive process, operation, or enterprise. It is in this originating and directing movement, and in this alone, that we discover the *causa causans* of the existence of the product. No claim in connexion with the productive operation can be put forward by Labor that is not equally valid on behalf of any other "contributor" of a requisite of that process.] (See page 444, *infra*.)

Again, the remuneration which Capital receives is so regulated by inevitable natural laws as to make it but a moderate and reasonable commission on the amount which Capital has added to the resources of the mutual-benefit association, the nation. (See page 459, *infra*.)

b. The remuneration of Labor. The employer must pay no more than the "going" wages, under penalty of inflicting disaster on the cause of Labor. (See page 476, *infra*.)

**C.—FOR THE INCITEMENT OF CAPITAL AND LABOR
TO UNITED ACTION.**

a. They have a common interest, as together constituting a Producer-Class, against the Consumer-Class. (See page 553, *infra.*) They have a common interest in the enhancement of Demand. (See page 364, *infra.*)

b. The most advantageous demand is the home demand : the best of the home demand is the demand of the labor-class. Hence it is the interest of Capital that the demanding-power of the labor-class should be great :—in other words, that wages should be high. (See page 364, *infra.*)

**D.—FOR THE ENLIGHTENMENT OF CAPITAL AND
LABOR RESPECTING THE MEANS OF SECURING
THE ABOVE DESIDERATA.**

a. The way to secure to Labor the highest remuneration is to give it the advantage over Capital in the bargaining between the two for the use of the faculties of the former. (See page 475, *infra.*)

b. The way to give this advantage is to give to Labor the requisite Intelligence for securing to it, by reason of its preponderance in numbers, the control of the public policy, so that it will be in a position to

c. So adjust the supply of employment to the demand for it as to give the advantage sought. (See page 532, *infra.*)

d. Capital, as also the other interests outside of the labor-class, will understand that this plan of action on its part involves no menace to them, because, Labor, being now intelligent and hence well-informed as regards, the laws of nature conditioning the subject, will under-

stand that nature has solved the problem of conserving those alien interests by enlisting in their defence the egoism of Labor in all its phases, from the lowest to the highest, thus :—(1) Labor can do no wrong to interests other than its own, without inflicting upon itself evils far more grievous ; (2) its equitable policy will command for it the applause of public opinion ; (3) its sense of duty will be satisfied ; and (4) its evolution in Character will be advanced in the direction of a magnanimous altruism. (See page 553, *infra*)

Considerations of space forbid that we should further extend the anticipation here of the discoveries to which we shall be led though the investigations yet to be made in these pages. But in fact it would seem that enough has been already set forth to satisfy any reasonable mind that if no phenomena of contrary purport are brought to light in the course of these more detailed investigations, the verification of our hypothesis is as complete as evidence of this nature can supply.

BOOK THIRD

Theory of Wealth.

INTRODUCTORY REMARKS.

In the course of the verification of our Theory of Human Progress in the last previous Book (see page 183, *supra*), we found it necessary to anticipate so much of what naturally belongs in this place, that we may set out here with the assumption that we have already been sufficiently enlightened respecting the leading attributes of wealth and the manner of its generation to enable us to take up the study of its related phenomena; but the complexity of these is such that it behoves us to exercise care and judgment in the arrangement of the order of their treatment. For example, the subject of Exchange finds its logical position as one of the features of Production, yet it is not possible adequately to discuss it until we have prepared ourselves therefor by a knowledge of the underlying principles of Consumption. In this dilemma it has been thought best to borrow a suggestion from the inductive sciences, which, according to the practice of the highest authorities, * use the term "induction" in a com-

* See Cairnes. *Logical Method*, III., 1.

prehensive sense which includes induction in the narrower meaning of the word, deduction, observation, etc. Following this example, instead of attempting to coin a new word for either the more extended or the more limited signification of "Production", we shall employ the word in its broader sense as embracing Production in the narrower sense in which it is generally understood, Consumption, and Exchange. Hereafter, when the word occurs unaccompanied by any qualifying phrase, it is to be taken in the ordinary and narrower sense, unless the context is such as to leave no room for doubt that it is to be understood in its broader signification.

The order of our procedure, therefore, will be as follows:—We shall take up in succession the subjects of Production, Consumption, and Exchange, dealing with each in severality, so far as the intimacy of their mutual correlations will allow: but with constant reference to the comprehensive view of the subject of Production in its broader sense, for the formation of which these more limited inquiries are prosecuted; following this, in turn, with an inquiry into the Distribution of wealth:—the whole constituting one General Theory of Wealth, and furnishing the subject-matter of this, the Third Book of our *Essay*.

PART FIRST.

PRODUCTION (IN THE BROADER SENSE).

CHAPTER I.

PRODUCTION.

The several forms of productive energy may be classified in rude general outline, as follows:

1. Those which impress changes upon the physical object which relate either to its external form or to its internal qualities, or both: such changes being the result of an artificial operation in which natural materials other than land, and natural forces are, manipulated in a manner to bring about the change desired. In this class are included all descriptions of "manufacture," in its broadest sense.

2. Those which are distinguished from class 1 by the circumstances, (1) that they employ the soil as the principal of the natural objects exploited, and (2) that they depend, for the most part, upon processes of natural growth to a degree seldom if ever known in any form of manufacturing industry. This class embraces all forms of productive enterprise usually called "agricultural."

3. Those which are analogous to class 2 in respect of their exploitation of objects native to their site

upon or in the land, but which are differentiated therefrom by the fact that, as a rule, they do not depend upon any process of natural growth co-operating with their operations. To this class belong the "mining industries."

4. Those which impress upon the physical object changes which relate simply to its presentation under such conditions of time and place as confer value upon that object, irrespective of any other change. In this category we include transportation, storage, the assemblage of assortments, and the like: a familiar example being furnished by the various forms of "mercantile industry."

In all of the above we recognize two leading factors, to wit, (1) man, and (2) nature external to man. Their several relations to production may, for our present purposes, be presented thus:

<i>Source.</i>	<i>Nature of the Contribution made. Contributor.</i>
Man.	Physical and Mental Faculties. { Labor.
Nature.	Physical objects and forces. Capital.
Man & Nature.	{ The site of operations. Artificial objects and forces, the products of previous productive operations, saved up and made auxiliary to production, in the shape either (1) of materials, (2) of works, tools, and appliances; or (3) of working, or circulating, capital. Capital.

For a Business Science of Economics, the questions to be determined are (1) of the characteristics of these several contributions, and (2) of the cost of each. Upon the latter subject,—the cost of the different contributions to the productive act or process,—our conclusions will depend upon the point of view. We may inquire as to

the cost (1) to the individual exploiting his own resources exclusively; or (2) to the individual exploiting the services or the resources of others; or (3) to the nation at large. We shall therefore follow up the inquiry into the nature of each contribution by an investigation of the principles which condition its cost considered with reference to each of the above interests, severally. First in order comes the contribution of the

A.—LABOR.—ITS NATURE AND COST.

When we come to analyze the phenomena of man's direct, personal, part in productive work, we observe two distinct classes thereof, due to his dual nature as body and spirit. His bodily structure contributes physical force, his spiritual nature intelligent direction of his own physical efforts and of the efforts, intellectual and physical, of others. So diverse in all particulars are these classes that we have no choice but to take up each of them separately.

1. Animal Labor. It is manifest as soon as we turn our attention to the subject, that even the lowest and most mechanical exertion of the human physical faculties involves—at least in their earliest practice—the element of intellectual exertion. There is no such thing, therefore, as drawing any hard and first line between physical and mental labor, and we must content ourselves with marking one out provisionally, as a temporary logical expedient, and claiming for it no more than that it is the closest approximation to the actual facts that is possible under the circumstances. Recalling the fact that in the case of the physical efforts contributed to productive work by non-human animals, there is to be observed, on the part of the animal, a certain directive, discriminating, exercise of its mental

faculties, we find in this a suggestion which we will tentatively adopt and see how its works. Let us, then, draw the line at that degree of the exercise of the intellectual faculties of the workman in his work which corresponds with the extent of the exercise of the intellectual faculties of the work-animal under like conditions, and call this combination of physical and mental exertion "animal labor"; giving a distinct place for this in the discussion, as though it were a distinct kind of labor, instead of constituting, as it does, simply an extreme form which blends by insensible gradations into the general body of human effort.

Viewed thus, we readily recognize the true estimate to be put upon the contribution of unintelligent labor in the productive act. Wherein can we point out any feature of difference between it and that of the ox straining upon the yoke, of the ass between two burdens? There is none. "The dignity of labor" is a phrase much in use in these days, but it is largely of a piece with the homage that flattering courtiers—with expectations—render their sovereign: for imperial Demos is of like passions with his fellows of the sceptre. But it is hard to discover the dignity that is held in common with the beasts of burden. Manifestly, that is not where the suggestion of dignity comes in. The dignity belongs elsewhere. It is when we contemplate the spectacle of the humble, unlettered, toiler, slaving in ash-pit or mine with patient persistence, day after day, year after year, that the home of his dear ones may be free from want, and he from the degradation of eating unearned bread—it is then that we perceive and appreciate the dignity that inheres in labor: it is then that we can feel that when the world has grown wiser, the

dinner-pail of the coal-digging ancestor will supply a prouder crest than the plumed casque of a harrying invader.

We now come to the question of the cost of this low form of labor, as regarded from the several points of view already indicated, to wit., (1) that of the laborer himself, (2) that of the entrepreneur, and (3) that of the nation.

a. How stand affected the interests of the individual laborer, because of his faculties being put to use instead of lying dormant?* He puts his services on the market and barters them for wages. What do these services cost him? We employ "cost" here in a sense which is not that of the ordinary business acceptation of the word. According to the latter, the cost of the thing bartered is synonymous with the market price thereof. But in its application in the present and all similar instances hereinafter, the cost means the actual expenditure involved in the rendering of the services contemplated in the barter, irrespective of the market value of the same. Taken in this sense, the cost will consist either, (1), physically, in an impairment of the material resources of the grantor, or (2) psychologically, in the impairment of his well-being.

What elements, then, of cost to the laborer, thus understood, do we discover among the phenomena of his contribution to production? Of a material sort there are, of course, none. He contributes nothing of this description. What he does supply is a certain

*In order to present the question in its simplest form, we assume that his sustenance, in equal measure as to quantity and quality with that supplied by his wages, is somehow provided without reference to the question whether he works or not.

measure of exertion of certain of his faculties. Hence the cost, to the laborer, of his labor is to be ascertained by striking a balance between the gainful and the harmful features, (to him) of this exertion of his faculties. Let us take up this in order.

(1) The advantages derived by the laborer from the normal* exercise of his faculties in animal labor.

Referring to the principle already enunciated (see page 214) of the development of the human faculties through their exercise, let us inquire into the extent of its application to the case in hand. It requires no protracted research to satisfy us that no very great advantage from this law is to be gained by the mere human drudge, however beneficent for human progress may be its working under other conditions. Once that his body has been toughened up to a certain measure of strength and endurance, once that his sluggish brain and nerves have acquired the habit of semi-spontaneous, semi-conscious, guiding of the muscles of the toiler in his treadmill round, what is there left to develope, expand, elevate?

Looking in a different direction, however, we *do* perceive an element of gain to the common laborer, resulting incidentally from his employment. This gain results from the discipline to which he is subjected as a necessary accompaniment of his position. It is hard to estimate the degree of savagery to which the most ignorant and degraded of those who supply the

* "Normal" is to be understood here as applied to labor which does not involve pain or injury to the laborer; which does not overtax his strength nor impair his faculties; and which yields him enough for the support of himself and those dependant on him, in health and rude comfort.

least skilled forms of labor—such, for example, as constitute the worst part of the present emigration from the south of Europe into the United States—would lapse, in the absence of this restraining and civilizing influence.

Again: the labor-organizations have at last reached down into this stratum of wage-workers, and the influence of these institutions in appealing to the thinking powers of these rarely-and-crudely-thinking men, in drawing them out from their perpetual limitation to purely selfish considerations, and in supplementing the discipline of the factory or the mine with that of the Association Hall, cannot but be felt with constantly increasing force in furthering their elevation.

To these favoring influences must be added that already alluded to, namely, the habit of obeying the impulses of self-respect and of family affection, in resisting the suggestions of sloth.

(2). The sacrifices attendant on the laborer's contribution of animal labor.

The phenomena of the case are sufficiently familiar; what is needed is the right interpretation of their significance. In order to reduce the matter to its simplest elements, we eliminate as before, all questions relating to the recompense received, and to the abnormal condition of overtasking, and confine our attention exclusively to the case of an unskilled laborer working, say, 8 hours per day during a period sufficiently extended—say a year—to exhibit the effects of the labor upon his body and mind, and then passing a month in idleness. In this way we have each work-day divided into one-third of labor to two-thirds of rest and leisure; each work-week into six

work-days and one idle day; and the twelve months of work-year to one month of idleness. Contemplating the phenomena of the work-time of each day, week, and year, in contrast with the corresponding rest-and-leisure-times, how do we find them differentiated in respect of the well-being of the laborer?

His work-time exhibits the phenomenon, peculiar to itself, of a violation of an inertia constitutional with him, so that the exertion necessary for overcoming it must be productive of sensations the reverse of satisfactory, to an extent conditioned upon (1) the strength of his love of ease, on the one hand, and, upon the other, (2) his capacity to feel and enjoy the sense of satisfaction derived, as to his physical nature, from the healthy play of his bodily functions induced by their exercise, and, as regard his psychic nature, from the consciousness of duty well performed. Now a comprehensive survey of all of these work-time phenomena resolves the whole into the proposition that the disturbance of a pleasurable existence involved in the labor is traceable to interference with—to the curbing of—a propensity of dubious value, whereas the satisfaction derived from that labor carries with it the development of a desire for things most valuable for the elevating of the laborer's character. Turning to the contemplation of his rest-and-leisure-time, we can, after the same comprehensive method, interpret the related phenomena as exhibiting a tendency toward the development of the inertia-principle to a degree that must enhance the repugnance to exertion and relax the relish for the mental reward for the self-sacrifice involved in diligence. The subject is one capable of an expansion which would be

out of place here, especially in view of the fact that the utmost analysis of its phenomena fails to reveal anything that is not consistent and confirmatory. The reader, however, who prefers to reach his conclusions for himself, can readily pursue the inquiry without further suggestion in this place.

If, then, nothing has been overlooked in our study of this subject, the conclusion seems inevitable that, in the human contribution to production which we have characterized as Animal Labor, the normal exertion of the faculties of the laborer involves a preponderance of gain over loss, irrespective of any considerations respecting the earnings of such labor. The ideal existence for the individual whose inferior mental development unfits him for other employment than this, is such an alternation of labor with leisure as will secure to him zest for life and at the same time freedom from the seductions to vice attendant upon a purposeless existence. He would be the better for the labor though the constitution of things were such that all his wages procure for him were his in any case. His "barter with nature" is not of the "higgling of the market" sort. He obtains her gifts in a way that is itself a gift. He has two separate and distinct returns for his efforts, namely (1) the product thereof, and (2) an excess of gain over loss in the productive operation, *per se*. At the close of his work-day, the laborer has his wages as clear gain, and, beside this, an excess of gain over loss in the summing-up of the day's transactions through which he gained those wages.

One reason why this simple and—when once suggested—obvious interpretation of the related phenomena, has not been long since enrolled among the

universally-recognized matters-of-course among the intelligent is this, that there is a lien upon the wages which modifies materially the earner's ownership of them. They are his, to have and to hold, nominally ; but the inevitable necessities of their earner and those dependent on him must be satisfied out of this resource, to its utmost exhaustion, before he can claim any assistance elsewhere. Those necessities must be met, at least in part, else he will be in no condition to earn wages. It is upon this ground that two eminent economists* have insisted that the sustenance of the labor during the productive operation to which it contributes must be included in the elements of the cost of production. Says one of them, in substance, "the bread, meat, potatoes, whiskey, etc., consumed by the workmen and their families during the time when those men were employed in the manufacture of a given quantity of steel rails are as strictly items of cost, as the coal that was consumed during the same time in the production of those rails. It was so much abstracted from the sustenance-fund of the nation, and is, *tanto quanto*, an offset to the value of the product—the rails." The position of the other is, substantially, as follows :— "Whatever enters into the conduct of a productive operation as an indispensable requisite thereof, must be taken into the reckoning of the cost of that operation: whatever it costs to secure that factor is a legitimate charge against the value of the results to which that factor has contributed."

Both of these objections being founded upon the

* In private correspondence, and in oral discussion ; the one a distinguished authority in the classic, the other a leading exponent of the protectionist, school.

classic doctrine respecting consumption, they will be considered in due order when we come to deal with that subject (see page 319, *infra*) ; but they also require some notice in connexion with the subject in hand. We shall endeavor to give this with as much brevity as the respect due to these objectors permits.

The proposition premised by the second of these has an axiomatic look, but it is not axiomatic. It not only is not self-evident, but it is not correct. When the factor in question must, through a necessity immeasurably more imperative than the creation of the product, be present, irrespective of whether the productive operation goes on or not ; when, in other words, the productive operation has no responsibility whatever connected with the consumption of the supplies in question, it is not permissible to contend that it is chargeable therewith. If that consumption goes on all the same whether the production is performed or let alone, what possible connexion between the two can be suggested, to give any color of a reason for making it an element of cost in the productive operation ? This answers at the same time the first of the above objections. The distinction between the meat and drink for the steel-rail makers and the coal for the steam-boilers and the furnaces is this ; to wit., that if the steel works had not been operated, the fuel would not have been consumed ; whereas the necessities of the operatives would have been as imperative in the one case as in the other. While the rail-making goes on, the coal is consumed ; when it ceases, the coal-consumption ceases. But the food, etc., for the work-people is consumed in the one case just as in the other. Is it not manifest, then, that the rail-production is the

cause of the coal-consumption, but not of the sustenance-consumption ; is changeable with whatever loss of wealth is involved in the destruction of the fuel, but not so in respect of the sustenance ? *

At the present moment, we are concerned with the case of the common laborer exclusively, and in view of all that has been presented above, it would appear impossible to escape the conviction that from his point of view he can regard his wages in no other light than as net gain; as so much of actual wealth to added his resources. And this conclusion we reach without reference to the abstract principle not yet fully discussed, that consumption can be accounted as cost only when it does not signify a judicious exchange of for wealth well-being.

That the foregoing view of this subject is not that commonly prevailing may—to some extent, at least—be explained as follows :

Instead of comparing the laborer at work with the laborer in idleness—both these phases of his existence occurring in the same environment, and this the one which ordinarily obtains—the comparison has been made between the laborer earning his bread by the sweat of his brow, upon the one hand, and, upon the other, the same individual surrounded by conditions under which nature spontaneously provides for him every requisite of a pleasurable existence. With the case thus stated, and ignoring every consideration of

* It may perhaps be objected that there will occur more consumption when the steel works are running and money plenty among the operatives, than when they are closed and the low-wages class pinched with poverty. This point will be considered in the Chapter specially devoted to the subject of Consumption (see page 316, *infra*.)

the value of the development of the faculties through their exercise, and of the development of character through discipline, there would seem to be no question of the hardship attendant upon labor. It must inevitably diminish the satisfactions of such a life. But of this method of treating the question there are two things to be remarked.

In the first place, our business science can not take cognizance of data so purely hypothetical. For it, the necessity for the laborer's effort, and the influence of that effort upon his physical, mental, and moral constitution, etc., are ultimate facts, the consequences of which, not the causes, it is our province to study. In the second place, there is a fatal confusion of thought involved in making the labor responsible for the sacrifices connected with the devotion of the faculties to this ignoble toil as compared with spending the same time in pleasurable and elevating occupations. For this is to mistake the remedy for the disease that necessitates the recourse to the remedy ; it treats the laboring as though it were the cause of the sacrifice. The illogical character of such an interpretation of the phenomena becomes evident when we recall the fact that if the labor were not performed, the condition of things would not be improved, but the contrary. Not this only ; we also perceive that the true cause of the sacrifices in question is to be found in the Existence of Evil, and that the laboring, under normal conditions, is an instrumentality for man's relief—in a greater or a lesser degree, according to circumstances—from the pressure of that feature in the natural order and constitution of things.*

* The classic political economists, for the most part,

b. c. The economic interests of the entrepreneur and of the nation in respect of the cost to each, respectively, of the labor employed in production are not materially affected by the question whether the labor is of the

absorbed in the study of the principles of Exchange, pay no heed to this subject, which, in its broader aspect, may be described as the question of the cost to the producer exploiting his own personal resources of body and mind. So completely has this absorption in problems relating to the exchange of commodities possessed that science, up to the present hour, that the teaching of Mill is still that of the highest institutions of learning throughout the civilized world, namely, that the constant and universal elements of the Cost of Production are the wages of the labor and the profits of the capital. We can understand how completely the question of the cost of his labor to the laborer, and of his self-sacrifice to the capitalist is ignored in such a philosophy, when we consider that it makes the laborer to be the loser by his labor to the extent of the wages he receives for it, and the capitalist out of pocket through his investment, to the extent of the profit which he realizes therefrom.

There is, it is true, the protest of Cairnes, who has pointed out (*Leading Principles*, Part I., Chap. III.) in the most convincing manner, the absurdity of putting the reward for the sacrifice, and has shown the importance to economic science of ascertaining the cost of his labor to the laborer, irrespective of the question of what he realizes in return therefor: of determining "what man parts with in the barter between him and nature, which must be kept eternally distinct from the return made by nature on that payment."

Here, one would suppose, we had come upon a case in which the absorption in questions of exchange had failed to divert the mind of the classic investigator from the true issue; but it turns out, on the contrary, that it simply furnishes a fresh and yet more surprising example of that absorption. The author has no sooner, to all appearance, emancipated himself from the thraldom of the exchange-mania than he drops back into the old strain and devotes his entire attention to "the law

animal, or of the intelligent, description. It is permissible for us, therefore, in the interest of brevity to postpone the discussion of this question in its relation to animal labor alone, until we shall be prepared to take up the question in its application to labor of both classes jointly. Adopting this course, we proceed now to the study of the nature and cost of

of cost of production, *as governing value*": to "the connection between value and cost of production." In consequence, he is concerned with the cost of the labor to the laborer only so far as to establish the connexion aforesaid, and he finds the measure for that cost in the remuneration received for it. Hence the classic theory of the subject stands amended thus:—It is not the wages of the labor that enter into the cost of production; it is the sacrifices made by the laborer, the economic measure of which is—the wages! In this way the classic critic of the classic doctrine, after a wide flight, returns to the same perch with Mill and the rest.

The classic Political Economy would, presumably, have been saved from a position so embarrassing for a system claiming authority because of its scientific methods, had it ever occurred to any of its prosecutors to question a certain assumption universally accepted without examination by all its founders and expounders; to wit., that the case of the nation, in respect of cost of production, is that of the capitalist. "Without examination" we confidently assert, because the slightest scrutiny must have shattered the assumption on the spot and shown that the chief interest of the nation in the question arises from the fact that its case is to so great a degree identical, not with that of the capitalist-entrepreneur, but with that of the individual exploiting his own resources.

It will, we believe, be made manifest in the course of our further investigations, that out of this mistaken assumption has proceeded a body of equally-mistaken conclusions, so vitally affecting the entire structure of its theory of international trade, that it can be amended only by its total reconstruction.

2. Intelligent labor. According to the plan of classification already explained, we have now to deal with all the forms of the exercise of the human faculties, physical and intellectual, superior to those which fall within the category of animal labor as defined above. For the business purposes of this Essay, no further definition of this higher description of labor is necessary, and we can enter at once upon its discussion upon the same lines as we have followed in the case of the inferior class.

This more elevated class of labor exhibits a wide range of qualities, commencing with forms but one removed beyond the work of the well-trained beast of burden, through progressive stages in handicraft and management, up to the finest manifestations of insight into the underlying causes of concrete phenomena or of the power of abstract generalization and of conjectural hypothesis reaching out into the unknown. Glancing over the entire field, from lowest to highest, we perceive that in direct proportion to the degree to which the character of the exertion recedes from the line of demarkation from animal labor, everything that has been remarked above in derogation of the claims of the latter to our respect, goes to establish the similar claims of the former. In the same way that we were able to recognize the dignity of labor as inhering elsewhere than in animal labor, *per se*, we can discover it as veritably inherent in the exalted forms of human effort; dignified in itself, and dignifying in its effects upon the individual exerting it. We see that there is no nobler position possible to man than his who deserves well of his country and his race. Work,—work for others and involving the exercise of the highest powers given to

human nature: the noblest faculties devoted to the highest good of man:—what else can life show of opportunity compared with this?

a. We come now to the question of cost, and, as before, take up first the case of the individual devoting his faculties to productive work, and inquire how his interests stand affected because of the use of his powers, whether of body or mind, as compared with their non-use. We also, as before, find our investigations limited to psychic phenomena; there being, *ex vi termini*, no contribution within the domain of the physical, other than the physical forces of the laborer's body, which are mere material manifestations of psychic forces behind them. We are therefore to inquire as to the cost of this higher class of labor to the laborer, on the same lines as in the case of the lower class thereof, namely, by striking a balance between the desirable and the undesirable results of the effort.

(1). As respects the gain involved in the development of the faculties through their exercise, we perceive that in proportion as the labor departs more and more from the line of demarkation between it and animal labor, the contrast between the higher and the lower forms in respect of the magnitude of the possibilities of this description of gain increases: thus when we come to deal with the higher forms of intellectual work, we find the rewards of labor resulting from this evolution-principle to be simply incalculable. From this extreme in one direction we can pass by insensible gradations, for the most part,* to the other, which stands

* The blending of one class of labor into that immediately above and that immediately beneath it, would seem, from one point of view, to be interrupted by the occurrence of the marked

next to the animal-labor class as defined for our purposes. All that need be said in this place is this, namely, that in whatever degree the intelligent differs from the animal labor, by so much is the gain of the more intelligent laborer from the evolution-principle greater than that of the less intelligent drudge: and we have already learned that, even for the latter, the excess of gain over loss, of advantage over disadvantage, is, under normal conditions, an unmistakable one.

The gains for the common laborer which we discovered in the discipline of the factory, etc., and in the influences of his membership in labor-associations, are of course to be looked for only in that portion of the higher labor which is connected with capitalistic production; but it is plain that the higher labor, in all its forms, derives greater advantages from all these sources than the lower labor can. The influences are more powerful and they are exercised on material more susceptible. That part of the higher labor which belongs to the capitalistic system of production has a larger field of action in the labor associations, and, by both precept and example, a more responsible position respecting the maintenance of order and discipline in factory, mine, etc. The part which does not belong to capitalistic production is, manifestly, still more favorably situated in respect of the developing influences with which we are now concerned. Here again, there-

distinction between labor in capitalistic production and labor wherein the laborer is his own employer—the latter form being observable, for example, in the author, the statesman, the professional man, etc.,—but that point of view has no particular interest for us in this place, seeing that it has no practical bearing upon the subject now in hand.

fore, as in the case of the gain from the exercise of the faculties, we are, beyond question, justified in the conclusion that whatever advantages the lower labor derives from the favoring influences in question, the higher labor must obtain the same in a higher degree.

Finally, comparing the two in respect of the satisfaction derived from work, and from the sense of duty well done, and as regards the benefits of self-sacrifice, we find no room for doubt that whatever of gain the lower labor can count in these particulars, a greater measure of the same must come to the higher. And this brings us to the question of

(2). The sacrifices attendant on the laborer's contribution of intelligent labor. The contrast which we found sometimes to exist between the employment forced upon the common laborer and that which we must recognize as less irksome and more elevating if it had been possible for him to obtain it, is still more pronounced in the case of the individual compelled by his necessities to accept work unworthy of his powers, and of a character to embitter an existence which, under happier conditions, might have been full of usefulness to others and of satisfaction to the individual himself. The sacrifices involved in labor under such circumstances constitute a phenomenon not to be ignored. Yet the principles involved differ in nothing from those which govern the parallel case relating to animal labor. The loss is a real and a grievous one. But against what account, asks our business science, is it chargeable? It is chargeable against whatever is the cause of it. That cause is not to be found in the employment itself. The necessity of devotion to the ungrateful rather than to the grateful work springs from

something outside of the performance of the work—something in the nature of an “accident,” external to and not of the essence of the “substance” of the productive effort. We trace it back, as before, to the Existence of Evil. The function of the repugnant exertion is to mitigate the hardships attendant on that fact.

Reviewing the whole field, it seems incontestible that all we discovered in our inquiry into the phenomena of animal labor to enforce the conclusion that the laborer belonging to that department of human effort in production must be regarded as being, under normal conditions, a gainer rather than a loser by his employment as contrasted with his non-employments bears with still greater force on the question of the gains and losses of the laborer belonging to the department of intelligent labor. We are therefore prepared now to pass to the consideration of

b. The cost of labor to the entrepreneur. From the business point of view, the entrepreneur is an abstraction. There is, in real life, no such thing as an entrepreneur who does not contribute any labor of his own: there is seldom one who does not employ some capital of his own. The entrepreneur of our science is a producer who exploits the labor and the capital of others, and he exists for us only in so far as his work is conducted on that basis, no matter how large or how small a part this exploitation may play in the totality of his operations. Thus understood, we perceive that it is a simple matter to answer the question of the principles on which to estimate the cost to the entrepreneur of the labor of others. He must pay the market price for it. The question of the conditions

which determine that price belongs elsewhere. For the present, it suffices that we understand that whatever may be the price of a given kind of labor, that is what economic law compels—under normal conditions—the entrepreneur to pay.

c. The cost of labor to the nation. We may discuss this subject from either of two different points of view. In the one case we may regard the nation as simply an aggregation of individuals, its wealth representing the sum-total of their wealth, its gains and losses being made up of the totalities of their gains and losses. In this case our work has already been done. The contribution of the laborer to production having been found to show a net balance of gain over loss to him under normal circumstances, the aggregate body of laborers in the nation will show a net gain to the nation equal to the sum of those individual gains. This, be it remembered, is the conclusion, the question of remuneration in wages being left out of the case—as indeed they must be, seeing that the wages paid are simply certain sums of money, certain measures of wealth, transferred from certain pockets of the nation into certain others of its pockets.*

The other point of view is that of the classic Political Economy in its theory of international trade as set

* It is not intended to assert here that it is, in every aspect of the subject, a matter of indifference to the nation whether the remuneration of its labor is great or small. The reverse of this will be found sufficiently accentuated in the proper place. But the points raised by this question do not belong to our present inquiry, which deals exclusively with what may be called the purely-commercial aspect of the subject of the cost to the nation.

forth, for example, in such passages as the following from Mill's *Principles of Political Economy*.

"According to the doctrine as now stated, the only direct advantage of foreign commerce consists in the imports. A country obtains things which it either could not have produced at all, or which it must have produced at a greater expense of capital and labor than the cost of the things which it exports to pay for them. It thus obtains a more ample supply of the commodities it wants, for the same labor and capital; or the same supply for less labor and capital, leaving the surplus disposable to produce other things." Book III., Chap. XVII., § 4.

The nation here is regarded as a business association, conducting productive industries and reckoning up what it gives for what it gets; what it parts with, expends, uses up, as a necessary condition of obtaining the product.

In view of what we have just learned respecting the difference in the elements of cost to the party exploiting his own resources and those which constitute the cost to the party exploiting the resources of others, it behooves us to make it our first business in the present inquiry to ascertain to which of these categories the nation belongs. If to the first, then the cost of the labor is to be determined by a comparison between the sum of the nation's resources in human faculties before employing them upon the productive act in question, and their sum at the completion of that act. If to the second, then the cost of the labor will be represented by the wages paid for it. But this inquiry need not detain us long. The answer suggests itself while we are formulating the question. It is this:

When the question relates to home products, the case of the nation is that of the individual exploiting his own resources; when to commodities imported from abroad, it is that of the entrepreneur exploiting the resources of others. To make sure that we have overlooked nothing here, let us look a little further into this matter.

First, then, in the case of labor contributed to some domestic industry, what can we discover of direct expenditure, such as that referred to in the above extract from Mill, in which the wages of the labor figure so conspicuously? Nothing. To say that the amount paid out by the employer is to count as a *minus* factor in the nation's wealth, but not as a *plus* factor therein when received by the employee, is to assert that the wealth in question lost its value *in transitu*:—which would leave the wage-worker in a bad shape. With all due respect to the high authority supporting it, namely, the unanimous voice of the classic school of Political Economy, the doctrine is not one whit less irrational than to maintain that the moving of a piece from one square of a checker-board to another, diminishes the number of pieces on the board. If, then, there is any cost discoverable in the case, it must be looked for in an impairment of the nation's resources in labor, traceable to the fact of its employment instead of its idleness. The question must be formulated thus, because it is a question of using merely—not using-up. The case is conditioned upon its limitation to normal labor; to use without impairment. What, then, does the mere use of the labor involve of cost, of loss, of sacrifice, to the nation? Again, nothing. It is impossible to specify a jot or tittle, if we leave out

of the case the sustenance of the laborer. Upon this point we ask, as before, the reader's indulgence until its settlement comes up in due order as a feature of the discussion of the general subject of Consumption.

Before proceeding to take up the inquiry respecting the nature and the cost of Capital, we will introduce here certain observations respecting the Supply and the Training of Labor, so that, without seriously interrupting the current of our reasoning, we shall have before us certain facts for which we shall find use in the course of our further researches.

THE SUPPLY OF LABOR.

In the department of this work devoted to the exposition of the more general principles conditioning human progress, we dismissed this subject with a brief allusion to the practically-unlimited supply of labor at the command of a nation able, by reason of the inducements it had to offer in the way of employment, to draw on the mass of humanity outside of its own population. There are, however, certain minor points connected with this subject the discussion of which belongs properly to the present stage of our inquiries.

It is a familiar objection on the part of the classic Political Economy when treating of the artificial introduction of a new industry, that it diverts just so much of capital and labor from employments in which they are more advantageously exploited:—thus ignoring altogether the obvious fact of the presence, even in the most advanced countries, of a surplus of unemployed labor. The reason for this lapse is to be found in the fact that if we take no note of anything beyond the immediate and superficial phenomena of

the case, newly-introduced industries do draw upon the labor-supply of certain of the old established industrial establishments. The natural working, as regards the labor of a country, of the introduction of a new description of productive enterprise is as follows:

The employer in such case seeks to provide the requisite labor at the cheapest rate possible. The surplus labor of the country being, as a rule, the least efficient,—or for some other reason the least desirable—is, as a rule, the worst paid when its members do get work; and, to whatever extent he can get along with this quality of labor, the new employer either takes it direct from the mass of the unemployed or from some established industry, which in turn fills the vacancy thus created, from that mass, directly or indirectly. But in the case of the greater number of new industries, there is a call for a better order of labor than that left unemployed, and, since this fact has been taken into the calculation before deciding to embark in the new undertaking, the new employer will be prepared to offer whatever inducements as to wages may be necessary to draw the requisite labor-supply from the established industries. The vacancies thus created will, it is likely, be filled for the most part from other employments; but no matter how many intermediate shifts there may be, the ultimate result is the fact that the new demand for labor has been supplied out of the surplus labor available; no industry has been left without its normal quota of workmen. The industries of the country taken as a single whole have absorbed out of the stock of unemployed laborers just such a number thereof as the new industry called for.

There is another familiar classic doctrine to the

effect that should laborers be thrown out of employment by the importation of a foreign substitute for a domestic product, they will "find other employment":—just as if there must always be, as a matter of course, opportunities of employment to be had for the seeking. When, at a later stage in these investigations, we come to understand the perplexity to modern statesmanship involved in this problem of finding employment for the labor and capital of a nation, we shall be able to appreciate the grasp of fact possessed by a science which calmly assumes that it is a question which may be left to itself.

A question arises as follows:—It is a fundamental principle of our system that every nation both can and should provide employment for every willing hand and brain within its confines. Under such a condition of things—supposing it arrived at—what would be the adjustment of the supply to the demand for labor, assuming that the introduction of new industries would still continue? The natural working of things under these conditions would be as follows:

The fact that a nation should conceive of such a policy and at the same time understand how to carry it out, implies a general diffusion among the great mass of the population, of an intelligence which would render the bulk of its labor fit for the more elevated forms of industry rather than for mere animal labor as we have defined it, and in consequence it would be in the domain of the latter, the ruder form, that would most be felt the pressure of demand upon supply. This would create an opportunity for benefiting a portion of outside humanity without developing a competition with domestic labor, by permitting the immigration,

from some less advanced country or class, of an adequate number of laborers to whom, though well enough fitted for their new work, the change would signify an immediate advance in well-being and a later one in character.

THE EDUCATION OF LABOR.

The subject of the education of the labor-class, in so far as it relates to whatever is common to that class and the rest of the population, belongs elsewhere. What we have to discuss in this place relates simply to the physical and mental training which is intended to render the labor of a nation more efficient as an agency in production.

When we investigate the phenomena of the apprenticeship system, we readily recognize the fact that it was better adapted to the past than it is to the present organization of industry. It had a double significance in the days of the Gilds. It then combined training in handicraft with preparation for membership in the trade-corporation:—the latter being an important and responsible position. The intimate domestic as well as business relations between master and indentured apprentice were calculated to develop in the latter familiarity with the methods of the former, not simply in workmanship and in business management, but also in the councils of the Gild. But when apprenticeship—as is inevitable under modern conditions—is reduced to mere instruction in handicraft, two serious objections, always inherent in the system but less conspicuous under mediæval conditions, become obvious. These are (1) the probability that the slovenly master will turn out slovenly journeymen, and (2) that the prejudices of the

over-conservative instructor may survive in the pupil to an extent inimical to the introduction of improvements of merit.

On the contrary, the introduction of training in the useful arts as a constituent of the common-school curriculum has thus far exhibited no seriously-objectionable features; and it recommends itself both by the fact that a highly-progressive spirit can be developed in the learner and a high order of intelligence secured in the instructor, and also by the uniform experience that the more distinctly intellectual work of the pupil is better done when carried on in connexion with systematic mechanical practice. It is of course to be understood that this advantage derived from the association of manual work and technical training with ordinary book-study is not manifested only in respect of the latter. The influence of hand-work on brain-work is not more marked than that of brain-work on hand-work. It is well known that the most business-like employers prefer, simply on business grounds, a high standard of intelligence in their employees, although such intelligence tends to make the latter alert to their rights. It is found that, in the long run, an intelligent body of workmen will be less unmeasurable in their demands and more open to conviction when the employer has justice on his side, than the same number of stolid, unreasoning, employees, especially when under the influence of unprincipled mischief makers.

Further remarks on the subject of this section will be found below in the department devoted to the practical application of the principles we discover.

B.—CAPITAL.—ITS NATURE AND COST.

As in the case of Labor, our first question is that of the nature and the cost of Capital.

Let us take a glance over the history of man's experience on the earth, beginning at the point when his physical and mental development sounded the fateful hour that marked his first step in advance of his fellow-animals. In what did this first step consist?

There are animals that utilize natural objects as implements. There are apes that hurl sticks and stones. There are animals that, out of natural objects, fashion implements. The elephant breaks off a small bough, strips it of superfluous twigs, and brandishes it as a flybrush. But man alone fashions and ~~keeps~~ implements. From this germ has been evolved every triumph of civilization and progress that the race has won. Such is the nature of capital—of Wealth as related to Production.

The question of its cost presents itself to us in two different aspects, namely, (1) the cost of the creation of capital; and (2) the cost of its dedication to production.

So far as concerns the first of these, the inquiry is necessarily confined to the case of the individual concerned in the accumulation of the wealth; the entrepreneur and the nation having no other interests in the matter than such as are connected with the results achieved. What, then, have the related phenomena to tell us respecting the cost, to the accumulator, of the accumulation of his capital. Manifestly, the phenomena are of the simplest. The capital-creator merely exchanges a present for a future gratification. Instead of eating his cake, he keeps it. The case runs in lines strictly parallel with those of the

laborer who sacrifices his love of ease and thereby wins from nature, not simply the product of his labor, but premiums beside in the shape of developed faculties, self-approval for the self-restraint practiced, new zest for existence, and a forward step in character-building. Instead of the laborer's product in the shape of changes impressed on an object, the capitalist has the uneaten cake, the unconsumed wealth, still in evidence. Otherwise his case involves no more of a "barter with nature," no more of "sacrifice," of loss, of things parted with, than the laborer's.

As regards the cost of the contribution of capital to production, the case—unlike that of the creation of capital—has its different aspects according as we have to deal with the capitalist himself, the entrepreneur, or the nation. Consequently, we must take up each of these questions separately.

Let us begin with the case of the individual capitalist exploiting his own resources in productive enterprise, and upon his own account.

For the purposes of our present inquiry it will be convenient to modify the classification of the requisites of production, other than labor, which capital provides, as set forth on page 254, *supra*, arranging them in the categories of "fixed" and "circulating" capital, respectively; the former standing for the site, the material forces—such as water-power—and all the plant (including in that term, works, tools, and fixed appliances), and the latter representing materials, goods finished and unfinished, and the like, and the remainder of the working capital in money or its equivalent. Again, we separate the fixed capital into the perishable and the non-perishable. The site and the

water-power belong to the latter class. In the former we place the plant and all its appurtenances.

Our first inquiry relates to the cost of the imperishable constituents of the fixed capital, and for convenience we will merge the case of the water-power in that of the site.

The nature of the site will depend largely on the nature of the productive operation to which it is subservient. For example, if the enterprise is a manufacturing one, the site will, as a rule, be different from that which will be required if it is mercantile; and again different if it is agricultural; but in no case is it "consumed," in the sense of being made away with. It is used, but it is not used up. It is there when the productive operation is over and done with, even as it was there before the operation was begun.*

Hence no question of cost can possibly arise respecting it, other than that of the cost of its use as compared with its non-use. Moreover, no question of the market value of this use can arise in this case—except as described below—because the site is a part of the

* Even in the case of mining enterprises, the site being merely the *ποῦ στῶ*, its permanent existence is not affected by the diminution of the mineral deposit. Its *value* may be thus affected, precisely as is the value of a farm site if the fertility of the soil be impaired, and a site for any productive enterprise may be raised or lowered in value by a change in respect of its access to market, or by a thousand other circumstances; but we are not at all concerned just now with questions of comparative value; we are inquiring simply as to the continuity of concrete existence—as to the using or using up of the physical object, the site itself, and it requires no elaborate argument to establish the fact that, *qua* site, it is not in any sense nor in any degree used up by its use for productive purposes.

producer's own resources, and his expenditure in the matter is to be gauged by a comparison of the condition of those resources before the productive act or operation, with their condition after that operation has been concluded. Now it is plain that, under ordinary circumstances, no impairment of the producer's resources can be traced to the use of the site, and hence it will make no figure among the elements of cost, to the producer, of his product.

The perishable constituents of the fixed capital are so classed because subject to deterioration by wear and tear. The maintenance of each item in this category, in full efficiency is, of course, a legitimate charge against the value of the product. It represents what is not simply used, but used up. The extent of the charge is to be determined on the same principles as the cost of any other element of sacrifice involved in the act of production.

We now come to the case of the circulating capital. This appears in three forms, to wit., (1) the cash or practical equivalent; (2) the materials which are destroyed in the cost of the productive operation; and (3) the materials on which a change is impressed thereby, and which, in their changed condition, constitute the product.

In order to simplify matters, let us confine our attention here to what we shall call the normal cases of the investment of capital, much in the same way as we restricted our discussion to "normal" labor:—the normal contribution of capital to production excluding all cases of the loss of the investment, as we made normal labor to exclude instances of overwork. This being understood, it is plain that, so far as the working cap-

ital is concerned, it is a case of using without using up: the capital goes through all manner of transmutations in the course of its services to the productive act, process, or operation, but there is no stage thereof, from start to finish, at which the existence of the capital, in some form or another, cannot be detected, until it finally emerges in combination with its profit, embodied in the value of the product. At first glance, this might seem not to be true of the second form of circulating capital as specified above, namely, that in which the capital is incorporated in materials which are destroyed in the course of the productive operation. But further study of the phenomena removes this misapprehension. Observe, for example, the case of the fuel consumed under the boilers of a cotton-mill. Why is it burned there, instead of in a pile in the open yard? It is because the combustion, as it is performed, amounts, in final analysis, to an exchange of so many tons of coal for so many heat units, whereby to obtain so many pounds pressure per square inch on the surface of the piston of the engine: the value of this force being finally discoverable in the value of the cotton cloth turned out under the joint influences of it and the other requisite conditions supplied for the purpose.*

* The reader will recall Mill's treatment of the same subject, as follows :

"A third fundamental theorem respecting capital, closely connected with the one last discussed, is, that although saved, and the result of saving, it is nevertheless consumed. * * If merely laid by for future use, it is said to be hoarded, and while hoarded, is not consumed at all. But if employed as capital, it is all consumed, though not by the capitalist. Part is exchanged for tools or machinery, which are worn out by use; part for seed or materials which are destroyed as such by being sown or

There remain to be considered the principles upon which to estimate the cost of those forms of the circulating capital which are either used up as a necessary requisite of the productive operation, as is the coal under the steam boilers of the cotton mill, or become incorporated in the product, as is the cotton in the cotton cloth. An analysis of the phenomena shows us that

wrought up, and *destroyed altogether by the consumption of the ultimate product*. The remainder is paid in wages to productive laborers who consume it for their daily wants ; or if they in their turn save any part, this also is not, generally speaking, hoarded, but (through savings-banks, benefit-clubs, or some other channel) re-employed as capital, and consumed, * * —during the whole time that the destruction" [of capital] "was going on, has had laborers at work repairing it ; who are ultimately found to have replaced, with an increase, the equivalent of what has been consumed." *Principles of Political Economy*, I., v., 5.

Observe the confusion of thought indicated by the passage which we have italicized. The question in hand is that of the consumption of the capital *during the productive process*. In proof of the affirmative, our author cites the fact of its consumption at a period subsequent to the completion of that process.

Coming to the point at issue, observe the something overlooked here. Mill has neglected to ask himself what designation he would apply to the results produced by the tools and machinery while being worn out : to the germinated seed, to the half-grown crop. Also by what term he would indicate the materials wrought up into partly-finished goods. Would not a sufficiently satisfactory one be "wealth appropriated to reproductive employment?" But this is Mill's own definition of capital. *Idem, Table of Contents*, I., iv.

Thus the broad-pinioned albatross, accustomed to soar at ease in the airy heights of abstract speculation, wabbles splay-footed and helpless over the slippery and sharp-cornered rip-rap of concrete facts.

the value, both of the materials used up and of those which are simply used, must be regarded as elements of cost in production, and their market value at the time must be accounted as being, *tanto quanto*, an offset against the value of the product. In the case of the articles used up, their value must be debited, not because so many tons of coal have been transformed into valueless gases and ashes in the operation of manufacturing so many yards of cotton cloth, but because the value of the force developed by the combustion of that body of fuel has been incorporated into the value of the product. There are two reasons why this is the proper view of this subject. In the first place, it is not a fact that the value of the coal has been destroyed. As we have just had occasion to note, there has been a change in the physical embodiment of the value, from an object, the fuel, to a force, the pressure, but nothing has occurred in the nature of wealth-destruction such as would necessarily be implied were we to found our debiting of the value of the fuel against the value of the product, on the circumstance that so much wealth was sacrificed when the coal was burned for its production. In the second place, the fact that the value of the cotton, which is not used up, must also be charged against the value of the product shows that there must be some common ground for taking this action, in the case both of the used-up and of the non-used-up materials. This common ground is readily discovered in the case of the cotton, namely, that since we include in the value of the cotton cloth the value of the cotton contained therein, we must include in the cost of the cloth-production the value of that cotton: otherwise the estimate of the profit realized from the productive operation would be

absurdly excessive. We include on the *plus* side the cotton in the finished goods : we must therefor take account of the fact that that body of cotton is a *minus* quantity in the cotton-storage shed : in other words, the producer's resources in raw cotton have been depleted by so much ; *qua* cotton, he has used up, parted with, this measure of it.

But it is not difficult to find it in the case of the coal also. Here also, as we have just seen in our inquiry into the question of the consumption of capital in production, the product embodies, as a part of its *value*, the result of the combustion of that measure of fuel which was used in the production of the cloth. The differences between the cases of the cotton and the coal, respectively, is this, that the former is visibly present in the fabric, whereas the latter is represented by the work, or the consequences of the work, done by it.

All the materials, then, being equally legitimate elements of cost to the producer, the question arises of the valuation to be put upon them. But this question is easily answered. The sacrifice, the loss, to the producer inheres in the depletion of his resources. The measure of his loss, therefore, is the cost of restoring the status antecedent to the productive act. In other words, the cost is to be ascertained by finding what would be the cost of replacing the materials.

Summarizing all that we have gathered respecting the cost of production to the individual exploiting his own resources in capital exclusively, we have the following results :

Under ordinary circumstances, no element of cost in respect of the site is discoverable. The wear and tear of the fixed capital, and the materials, whether

destroyed or incorporated into the product, constitute a charge, at the cost of their replacement, against the value of the product.

Next in order comes the case of the entrepreneur. This of course need not detain us long. The capital employed by him belongs to others, and he can have the use of it only by paying for it whatever the circumstances conditioning the case make necessary.

The question of the cost of capital dedicated to production, considered from the point of view of the interests of the nation, is not so easily disposed of. While it is manifest that, as a general principle, the fact of the dedication by some of its individual members of a part of their wealth to productive enterprise is tantamount to the nation at large taking the rôle of an individual exploiting a part of his resources in capital, it remains true nevertheless that when we come to the question of estimating the cost of such dedication, differences in details as between the proceeding in the cases of the individual and of the nation, severally, make themselves visible.

In the case of the fixed capital, there would seem to be nothing to differentiate the case of the nation from that of the individual, so far as concerns the site of operations. It is a case of using without using up. As a rule, it is there after the cessation of its employment for productive purposes, just as it was before such occupation was begun, and its use, as we have seen, involves no expenditure on the part of the individual, and hence none by the nation. In no particular are its resources impaired by its use, any more than by its non-use. But when we come to the case of that part of the fixed capital, the maintenance of which involves

cost to the individual, to be estimated just as if the repairs and replacements were ordinary cases of production, we discover a difference between the interests of the individual and those of the nation. It relates to the materials employed, whether destroyed in the productive operation or embodied in the product. The difference is this:

The individual estimates his cost in materials employed, at the cost, to him, of their replacement. His resources in materials have been depleted to that extent, and whatever it costs him to restore the previous status in that particular he must include in the cost of the product in the production of which those materials were used up. In the case of the individual, this is usually a simple matter, because he has the market price of the articles to guide him: but when we come to the case of the nation, we perceive that this method would often be misleading. If, for example, we undertake to determine the cost to the American Union, as a single industrial association, of the production of a ton of steel at a certain date, and have brought within a satisfactory approximation to the fact the quantity of coal which it requires, at what price are we to estimate it? If we take the market price of the coal as it lies in the mineral formation—in other words, the royalty paid to the mine-owner—at that time, we should be proceeding as though all the coal-formations within the area of the United States had a market value at that rate:—which would be absurd. If, again, we reckon the depletion in the national resources in fuel of this kind by what it would cost to replace the amount removed, we find ourselves involved in an equal absurdity. Take, for instance, the case of a foundry in Gunnison,

Colorado, using ten tons of coal per day; the market price of which, at that point, is, let us say, \$2.00 per ton. Now shall we estimate the depletion of the national resources in coal, through the operations of this foundry, at a price per ton that will cover the delivery there of foreign coal of equivalent quality? It must come from somewhere in British America. The answer is obvious. The only clear and definite idea that we gather from all this is, that the cost to the individual will represent the possible maximum which the cost to the nation can in any case reach, so that, when we adopt this criterion in otherwise difficult cases we are safe against any error of under-estimate in respect of this item. But in settling this point we have settled everything relating to the cost to the nation of the employment of capital in production, as compared with its non-employment. We search in vain through all the phenomena of the subject for any element of cost to the nation other than we have already discussed.

There is another point not hitherto noticed in connexion with this subject, which goes to confirm—if, indeed, any confirmation be called for—the conclusion just arrived at. The point referred to is this: that, as a rule, the capital invested in new industries is Surplus Capital, so that it is not a question whether a certain measure of capital shall be invested in a certain enterprise to the decapitalization of another, but whether, as the question has been stated in the present discussion, that capital shall be employed or shall remain idle. The settlement of this point will be the next subject to occupy our attention.

Applying now in the case of capital the same question as we asked in the case of labor, to wit., the cost to

a nation of the employment in production of the foreign instead of the domestic instrumentality, as is done when a foreign is substituted for a domestic product, we find the same answer: the case of the nation is that of the entrepreneur: it must pay for the use of the capital of others. The price which it must pay for the imported article will include the profits of the foreign capital as well as the wages of the foreign labor.

This leads up to a point not suggested by the case of labor. We have to consider the case of foreign capital employed in domestic industries. It will be seen presently (page 296, *infra*) that capital may flow in from anywhere in the outside world, under the law of its gravitation, as labor may: but the difference between the two lies in this, that the wages-receiver comes with the labor, which thus ceases to be foreign, whereas the profit-receiver may stay abroad and his capital consequently remain foreign. How then stand affected the interests of the nation in such a case?

Manifestly, the amount sent abroad to pay for the use of the foreign capital is a *minus* factor in the wealth thereby produced. There are, however, other considerations connected with this subject which must not be overlooked in forming any conclusions respecting it; but these are so especially of a practical and business character that their discussion is best deferred until it comes up in order in the department of Practice, for which see page 531, *infra*.

C.—THE SUPPLY OF CAPITAL.

We now approach a topic which should command our closest attention. If we fail to establish our fundamental proposition that the means are always at com-

mand for capitalizing every productive enterprise that can, in the judgment of capitalists, show due warrant for asking it, we may as well drop our entire line of inquiry, here and now. For observe:—Our scheme of progress involves the provision by the nation of opportunities of employment for the whole of its labor, and these opportunities are to be secured by providing a demand for the results of such employment.

If, then, “demand for commodities is not demand for labor,” because the capital requisite for the newly-required industry “must be withdrawn or withheld from some other,” * our system goes to pieces because of the impracticability of the very first step in the working programme.

But we no sooner set ourselves to grapple with the facts than we become aware that our difficulty is to be, not with perplexities arising from obscure and discordant indications, but from the deluge of evidences, all of one purport, which overwhelms us. If ever there was a case of *embarras de richesses*, we surely have it here. The puzzle is how, out of such a mass of instances, practically identical in their bearing upon the case, to select any that can be regarded as specially typical. But since it would be absurd to attempt to excuse the failure to present examples on the ground of the ease with which they can be cited, let us offer something specific, even though it suggest the spectacle of one who dips a cup of water from the Atlantic ocean to call attention to the magnitude of the mass from which it is taken.

Upon one occasion the writer, while engaged in the

* Mill. *Principles of Political Economy*, I., v. 1.

discussion of this subject with a friend, turned to the pages of a New York daily newspaper which he happened to have in his hand at the moment, to see what it might chance to yield of current news bearing upon the subject of our conversation. The result was this :

Among the foreign news was an item from Berlin, to the effect that Prince Bismarck had conferred with Herr Bleichroeder concerning the inordinate investments of German capital in Russian securities ; one from Paris, reporting a fresh rumor of a readjustment of Panama Canal finances, whereby to save something out of the vast amount which French citizens had put into that enterprise ; and one from London, which announced that £30,000,000 had been subscribed for the £6,000,000 new stock offered by the Guinness Brewing Company, of Dublin. The local financial column contained reports of sales on the day previous, of United States four-per-cent. bonds at prices which would net the investor less than two and three-quarters per cent. per annum. Consider for a moment the significance of such an incident : the far-reaching implications connected with each of the facts here touched upon : the endless number of similar indications that might be drawn from similar sources : and in view of all this recall the claim of the classic Political Economy that it subjects such deductions as that respecting the Limitation of Production by Capital to verification by comparison with "the actual current of events."

But this is not the greatest of our surprises. As will be found presently in that portion of the present chapter devoted to the subject of Exchange (see page 379, *infra*) the entire trade-policy of the British Government is—and has been since it had any policy on the

subject—founded on the principle that the first care of that Government, after providing for the national defence, should be the provision of employment for the labor and capital of the nation, through the development of Demand. That the classic Political Economy has never entertained the remotest suspicion that this was the case needs no elaborate demonstration. The fact is conclusively established by the circumstance that there is not to be found in the entire range of its recognized literature the slightest allusion to the anomaly involved in such a contradiction between the accepted dogma of a nation's science respecting economic policy, and the practice of that nation's Government. But what kind of a claim for authority on a business question such as that of the supply of capital can that system assert which can remain in ignorance of such a condition of things?

It may be asked, "But if the evidences of the fallacy of the doctrine of the limitation of production by capital are so obvious, so pervading, as you would have them to be, how comes it that the classic economists, even when expressly concentrating their attention upon the subject, have failed to recognize and appreciate them?" The answer furnishes the third in this series of surprises, for the fact of the business is that that recognition and appreciation has been complete. The language of Mill and of Cairnes on this point, is so clear and positive that we need quote but a few brief passages, as follows:

"The great amount of capital seeking investment excites astonishment whenever peculiar circumstances turning much of it into some one channel, such as railway construction or foreign speculative adventure,

bring the largeness of the total amount into evidence." Mill. *Principles of Political Economy*. I., xi, 4.

"The second requisite of increased production, increase of capital, shows no tendency to become deficient. So far as that element is concerned, production is susceptible of an increase without any assignable bounds."—*Ib.*

See also the whole of Chapter V., Book IV. Here Mill explains how a self-regulating process must—except in cases of the abstraction of an inordinate amount of capital—maintain the supply thereof; the abstraction, by raising profits and interests, giving a fresh stimulus to the accumulative principle which speedily fills up the vacuum. So effective does he consider the working of the principle to be, that he asserts that the utmost expenditure which could be requisite, even for such great undertakings as the industrial regeneration of Ireland or a comprehensive measure of colonization or of public education would not, in all probability, deprive one laborer of employment or diminish next year's production by one ell of cloth or one bushel of grain.

In the portion of this Chapter devoted to the discussion of the consequences of sudden and extensive investments of capital in some new line of enterprise, he undertakes to show that "the capital of the country, far from having been in any way impaired by the large amount sunk in railway construction, was soon again overflowing." In the same way, he regards the emigration of capital as amounting to nothing more than this, that it merely draws off at one orifice what was already flowing out at another; or if not, the greater vacant space left in the reservoir does but cause a

greater quantity to flow in. In the next previous chapter, he alludes to "the perpetual overflow of capital into colonies or foreign countries."

Cairnes is no less emphatic. "The existence of a large amount of capital in commercial countries in disposable form—or, to speak less equivocally, in the form of money or other purchasing-power, capable of being turned to any purpose required—is a patent and undeniable fact." *Leading Principles*, I., iii., 5.

Not only do we have this testimony of the highest classic authorities to our interpretation of the phenomena in the case, but we are able to explain those phenomena: to trace them to their causes in the laws of nature and of human nature. These causes are various in character and differ in relative efficiency according to differences in individual character and in environment, but the main fact for our business science is this, that, as a rule, the most effective among them exist independently of the expectation of profit to be derived from the savings. To this circumstance is due the fact that the accumulation of capital is excessive in comparison with the opportunities for its satisfactory investment. It is needless to occupy space here with anything beyond the mere mention of the chief among these spurs to the preference of a future to a present expenditure. A prudent regard for the contingencies of life, for securing now the comfort of the future, the desire to provide for those dependent upon us, the aspirations to the social consideration that wealth, whether on a large or small scale, gives to each among his fellows, and, often most of all, the pressure of that unreasoning mania of accumulation which grows with what it feeds on, as shown by "collectors" of books,

beetles, or bric-a-brac, and fastens like a consuming passion on the devoted money-seeker, making his sole pleasure in life the thought of the ever-growing hoard.

Such are the forces at work in the more advanced industrial nations to secure, through the ordinary and normal operation of the national laws of human motive, the constant existence of a body of unemployed capital, always available for any productive enterprise that can give adequate assurance, either of ordinary profit with less than ordinary risk, or of more than ordinary profit without more than ordinary risk.

D.—LABOR AND CAPITAL.—THE COST OF LABOR AND CAPITAL TO THE NATION, AND THE CONSEQUENCES THEREOF.

We have now reached the inquiry to which the previous part of the present Chapter is simply introductory. Having, by the investigations conducted throughout that portion, arrived at the principles which should control our estimates of the cost, to a nation, of its supplies, domestic and foreign, let us now try to see how they work in hypothetical practice. We will first approach the subject with a case reduced to its simplest possible elements.

The A family consists of three brothers; John, James, and Peter. The brothers have inherited the farm which they cultivate and on which is their home. John, having some money of his own laid by, contracts with B, the cross-roads merchant of the neighborhood, to deliver to him 10 bushels of chestnuts at \$1.50 per bushel. He then says to James and Peter, "You boys have plenty of spare time now when there is so little to do on the farm, and there are quantities of chestnuts

back on the hills. If you will gather 10 bushels of them and leave them at B's store, I will pay you \$1.00 a bushel for them." The bargain is closed and carried out. John pays over \$10.00 to James and Peter and collects \$15.00 from B. The question now is, How stand affected the interests of the A family by these transactions? On the *plus* side, we find a gain of \$15.00. Capital has received profits to the amount of \$5.00, and Labor wages to the amount of \$10.00. What, then, is there to represent the *minus* side? Nothing in respect of Capital. John has his \$10.00 to the fore, all the same as if he had never sold a chestnut. Nothing on the part of Labor. James and Peter have impaired none of their faculties by reason of their exercise of them in nut-gathering. They are a few days older, but that would have happened to them in any case. They could not have employed the time spent at this work in any other way with tangibly profitable results: their environment and their methods of spending their leisure not justifying any such assumption. Has there been any depletion of the family resources in any particular? There is the sustenance of the labor employed. James and Peter could not have gathered the nuts had they not been fed, clothed, and sheltered. Their maintainance, therefore, in good working-order was an indispensable pre-requisite of the productive work. The sustenance fund of the A family was reduced by so much as those laborers ate up and wore up during the period of the nut-gathering. True; but what part of this expenditure was an effect of which the nut-production was the cause? What part of the impairment of the family resources would not have taken place had there been no chestnut-enterprise?

Look where we may, we fail to discover anything in the actual current of events, from the beginning to the close of this transaction, to suggest an element of cost in this employment of the labor or the capital of the family as contrasted with their non-employment.

Now can any reason be suggested why this history of a productive enterprise in its bearing on the economics of this domestic organization is not equally applicable to the political and industrial organization called a nation? If not, we are compelled to accept the proposition that, under normal circumstances, the cost of production to a nation exploiting for the purpose its own resources exclusively, includes nothing for the use of its resources either in human faculties or in accumulated wealth.

In pursuit of the inquiry into the applicability of our hypothetical case of domestic economics to the economics of the nation, we shall now take a leaf from actual business experience on a large scale and see what light it can give us. The source of our information in this instance shall be *England's Supremacy: its Sources, Economics, and Dangers*, by J. S. Jeans. London, 1884. The author's official position for many years as Secretary of the British Iron and Steel Institute has made him familiar with the movements of British trade and the practical side of economic thought and opinion in that country; while at the same time a leading aim of his work appears to be the confirmation of the classic doctrines respecting international exchange. In this way he combines in himself the—to us—desirable qualities of familiarity with the facts with a strong bias in favor of the economic faith which we attack.

We quote from the Introduction as follows :

“The unique wealth of this country” (England) “is the direct result of her manufactures, and the reasons why manufacturing industry contributes so materially to a country’s wealth are not far to seek. They may be found in a comparison of the cost of the raw materials of commerce with that of the commodities they are employed to produce. The manufactures of England are mainly the products of raw materials imported from abroad. * * For our cotton manufactures we import raw materials to the value of £47,000,000, and, after clothing our own 37,000,000 of people, we export cotton goods to the value of about £63,000,000 : the difference between the two sets of figures being mainly created by industry. * * So it is with our woolen and other industries, the raw materials imported being subjected to processes of manufacture which increase their value precisely in proportion to the amount of labor bestowed on them : such increment varying from perhaps only twice the cost or value of the raw materials to a hundred or, it may be, a thousand times that value.”

There can be no mistaking this language. The explanation of the extraordinary accumulation of wealth in England is to be found in the comparison of the cost of the raw materials with the selling price of the finished goods produced therefrom. What place in this reckoning is assigned to “the wages of the labor and the profits of the capital”? They are no more considered, as elements of cost, than if English labor and English capital had had nothing to do with the operation which transformed the crude into the finished articles. Yet is it rationally supposable that any sane business man would take any other position on this question than that of our author as here presented? The statement has been before the public nearly ten years now, and not a whisper of dissent has been uttered. How could there be? What possible reason

could be assigned for treating the earnings of either employers or employees as wealth parted with by the nation? Mr. Jeans's interpretation of the facts simply formulates the universal conception thereof as a business question, unconnected with economic philosophizing.* Let us now apply the same principle to a few practical examples, and see to what conclusions it leads us.

Our first shall be one which relates to both agricultural and manufacturing industry, and we shall assume, for the sake of simplicity, that the nation, throughout all the various stages of the productive operation, exploits its own resources exclusively. The case is that of the manufacture of woolen fabrics.

The production of the raw material for the manu-

* Compare with this the following :

"From this exposition we perceive in what consists the benefit of international exchange, or, in other words, foreign commerce. * * According to the doctrine now stated, the only direct advantage of foreign commerce consists in the imports. A country obtains things which it either could not have produced at all, or which it must have produced at a greater expense of capital and labor than the cost of the things which it exports to pay for them. It thus obtains a more ample supply of the commodities it wants, for the same labor and capital ; or the same supply for less labor and capital, leaving the surplus disposable to produce other things. The vulgar theory disregards this benefit, and deems the advantage of commerce to reside in the exports : *as if not what a country obtains, but what it parts with by its foreign trade, was supposed to constitute the gain to it.*"

Mill, *Principles of Pol. Economy*, III., xvii., 3, 4.

Observe the metaphysical flavor of the passage we have italicized. Fancy an actual business conducted on reasoning of this kind.

facturing process, the wool, is, in view of the principles already established, easily disposed of. As credit items in the account, we have the value of the wool, and the increased fertility of the sheep-ranges : to the debit side belong the wear and tear of the fixed capital embodied in the sheep-farm improvements.* As regards the production of the finished goods out of the wool, we have the *plus* factor of the value of the goods, less the *minus* factor of the depletion of the nation's resources (1) in wool, (2) in machinery, etc., and (3) in fuel, dye-stuffs, etc., in their native condition and site, untouched by the hand of man. We throw in "for good measure" all ulterior considerations, such as the betterment in Character, whether resulting from the development of the faculties by the exercise thereof involved in the manual work performed, or in the management, or from the evolution of a higher order of wants, through the command of the means, in wages or profits, of satisfying the lower needs of the individuals concerned. To doubt that, under all the circumstances, the expenditures are fully recouped by the receipts, would be simply irrational, and we can safely assert that, if we have overlooked nothing of serious import in the case, the home-produced woolen goods must be accounted as costing the nation nothing. The difference between the status of the nation's resources before and their status after the producing operations, lies in the increment in the nation's wealth incorporated in the new body of woolen goods : the nation's resources in plant-food, in human faculties, and in money-capital, have at least suffered no impairment by reason of the perform-

* Which is easily offset by the value of the increase of the flock.

ance of the productive work, and as regards all minor points there is no unfavorable balance.

Our next practical example is taken from metallurgical industry, and relates to the production of the great staple of the new age of steel, to wit., steel billets. Let us assume, as before, that all the requisites of the manufacture are provided out of the nation's own resources. In what particulars, then, are these resources impaired by the production of, say, one million tons of this commodity? There is so much of iron ore, so much of coal, of limestone, of fire-clay, etc., in the ground; of timber in the forest; and of miscellaneous minor supplies for the running of the blast-furnaces and the steel plant, and their maintainance, including that of the necessary transportation facilities. Two dollars per ton of finished billets would be an extravagant estimate of the aggregate cost of these at the scale of prices obtaining in the United States in 1894. What other items of cost, of sacrifice, on the part of the nation can we discover? None. Two dollars per ton, then, is the outside estimate of the cost to-day of the production of a ton of steel billets in that country, and to that country considered as an individual producer exploiting his own resources exclusively.

With a view to illustrate a collateral principle, we now alter the conditions of the case to the extent of the assumption that a part of the requisites of production are imported from abroad. Such is to some extent the state of things in Belgium, where British pig iron is sometimes employed as the raw material of the steel manufacture. Under these circumstances, the account of the cost will stand thus:

The price of the imported pig will be an element of

cost to the nation, from which, however, is to be deducted the saving in the domestic resources in raw minerals, woods, etc., involved in the omission of the blast-furnace operations. In other words, when the crude iron for the steel-process is produced at home from home materials, the value of the requisite amount of those materials is expended, but the price of the foreign iron is saved: when the iron is produced abroad from foreign materials, the value, to the nation, of the domestic materials is saved, the price of the foreign iron expended.

The results arrived at in the above cases of the home-production of the woollen goods and the steel billets, through the application of Mr. Jeans's principle of the cost of labor and capital in production, seem surprising—almost incredible, indeed—even to us who have worked up to them, step by step, discarding, one after another, the misconceptions which have hitherto so wretchedly complicated the reasoning on the subject; but that this reluctance to accept the conclusions reached arises from their novelty alone, and not at all from any intrinsic difficulty in the case itself, will become plainer and plainer as suggestion after suggestion occurs to the thoughtful inquirer, and fresh instances are encountered of ready and simple explanations of economic phenomena never before satisfactorily accounted for. In order to help familiarize ourselves with the new doctrine—or, rather, with the common-sense business view of the subject, now appearing in the novel aspect of a substitute for the old classic theory—let us take another look at the question of the analogy between our hypothetical chestnut-industry and the examples from real life cited by Mr. Jeans as to English,

and by ourselves as to American, productive enterprise. All of these, both hypothetical and real, and all of the vast body of industries of which they are types, are capable of being included in a single comprehensive generalization, as follows:—The productive process impresses on the object subjected to its action a change which is in the nature of a creation of new wealth: “creation” being employed in the sense of making something out of nothing: causing value to exist where no value was before; or else a value distinctly other than and essentially different from the value previously inhering in the object. The instance of the chestnuts and of the American wool are cases of the former, the others of the latter, descriptions.

The nature of the change impressed on the nuts is recognizable when we compare the condition of the ten bushels which B is putting up in barrels for shipment to his produce commission merchant in the city, with the condition of those left lying in the forest, indistinguishable from the rest of the year's crop of mast, destined to feed the raccoon and the squirrel or to sprout into underbrush. The psychic element in the body of wealth represented by the gathered nuts is a new creation. It has been created by the act of securing the nuts and conveying them to a place where, under the working of economic law, they are invested with value. But the special point here for us is the fact that not one jot of this value has been drawn from the producer, the A family. That value, that body of wealth, the concrete and incontestible fifteen dollars, is secured by the family through a process of exchange, so far as concerns the transaction with B, but, as regards the transaction with nature,—which is the thing that

interests us—the wealth is secured through a process which has no element of exchange in it: no giving of something for something gotten: no *quid* for the *quo*. The wealth embodied in the chestnuts constituted an increment to the family resources to the extent of \$15.00; but there was no related decrement to figure as a set-off against it.

This interpretation of the facts makes it possible for us to reach a clear and systematic conception of the Genesis of Wealth—the creation of Wealth out of Non-Wealth. We perceive that it bears a close analogy to a certain purely-physical process. Even as heat is evolved by the direction of the free oxygen of the atmosphere upon suitable combustible substances, so is wealth evolved by the direction of the human faculties upon suitable natural objects.*

* The position of the classic Political Economy upon this subject is hard to make out. As "the Science of Wealth," it should, one would think, present clear and precise information respecting such fundamental questions as that of the Genesis of Wealth. But the more diligent the search, the greater becomes the perplexity.

Speaking in general terms only, the attention which it gives to the subject of Distribution would indicate that it accepts as a matter of course the conception of the productive process as resulting in a Something Over, a balance of gains over sacrifices. Then again, its distinct recognition of consumption as the inevitable and, usually, fast-following doom of all wealth produced, necessarily involves the idea of production as the restorer of the supply of wealth requisite for keeping up the continued round of having and destroying.* ["Everything which is produced is consumed. * * Everything which is produced perishes, and most things very quickly." Mill. *Principles of Pol. Ec.* I., v., 7.] Yet we find much to obscure the clear outlines of the simple business proposition

We turn now from the imaginary to the real: we revert once more to the case of those British industries which Mr. Jeans so justly regards as supplying the materials for that grand structure, the unique wealth

that the essence of wealth-production is wealth-creation: is the birth of new wealth; the winning of a new reward, premium, bounty, from nature; and that the element of exchange is not essential but incidental; many acts of production being wholly wanting in it because yielding a valuable product without the sacrifice of any valuable thing.

As the science was left by Mill, the question of the cost of production, from the nation's point of view, was reduced to terms of the extremest simplicity by adopting—evidently without examination—the erroneous assumption that the position of the nation as regards this question, was identical in every particular with that of the individual entrepreneur: the inevitable logical result being to make “the wages of the labor and the profits of the capital” the great leading factors in the cost of its home products, and sinking clean out of sight the distinction between the cost of using one's own resources and the cost of using those of other people.

Cairnes, (as already described, see page 266, *supra*) recognizing the difference between sacrifice and the reward paid for it, and undertaking to explain in a more satisfactory manner the inclusion of wages and profits among the elements of a nation's cost of production, started in to inquire what was really given for what was gotten; but the besetting classic propensity to see a bargain in everything must needs interpose to make even this subject legitimate material for a “science of exchanges,” and—what with sinking the case of the nation in that of the individual, and then bending everything to the purpose of establishing a connexion between exchange-value and the cost of the sacrifices made by the laborer and the capitalist—he finally brought up at the conclusion that the market price of these sacrifices, as paid to the sacrificers, is the measure of their cost to them. It is a square deal, value against value. In the case of the laborer, it is a barter; a barter with nature, whereby the laborer obtains

of the British nation. Here, as already remarked, we have an instance of new wealth added to an existing body of wealth. But the distinguishing and essential feature, the *new* wealth in the case, is as much an

the result of his labor in exchange for efforts whose cost to the laborer must, according to the economic law of the correspondence between sacrifice and remuneration, be equal to what he is paid for it. Similarly as to the case of the capitalist. It is *quid pro quo*, every time. To the business sense, the outcome of all this is, that production signifies no growth in wealth. There is simply a body of sacrifices worth x in concrete wealth, exchanged for their equivalent in the latter. From the business point of view, therefore, two difficulties obstruct the acceptance of our author's exposition of the subject, as follows:—In the first place, the objection is that the theory fails to account for the evolution of new wealth. In the second place, the difficulty of expressing things belonging to one department of thought in terms that relate to another, calls up the vision of a laborer offering on the market a certain number of quarts of ease, a capitalist a certain number of pounds or yards of abstinence.

That the classic Political Economy, as a whole, has not attained any definite conception of production as a wealth-creation, in the sense indicated by our comparison of it to the creation of heat through combustion, is shown by examples such as the following, chosen almost at random from the swarm of such that suggest themselves.

One of the most eminent of American economists declares his belief that it would be a difficult task to establish the necessity of drawing the lines of industrial circumvallation along the boundaries of empire; in other words, that it would be hard to explain why a statesman should be concerned to have a certain productive operation, a certain industry, carried on within the boundaries of his own country rather than elsewhere. Some new analysis of the conditions of production may yet, he suggests, disclose the law which makes such anxiety reasonable, but thus far, he asserts, the thing remains to be done. Such testimony from one whose economic works are world-famous

example of increment free from all drawback of accompanying or consequent decrement as we found in the experience of the A family. There is no impairment of the resources* of the British nation traceable to the

* It must be borne in mind that the questions, both of the risk of the loss of the capital invested, and of the overstrain of the faculties enlisted, are left out of the reckoning.

as being among the most valuable of recent contributions to the classic system, should suffice to prove that that system has not expounded a doctrine concerning the genesis of wealth such as our inquiries suggest, and such as Mr. Jeanes sets forth as an English business-man's conception of the subject. It is plain that had the American economist's science taught the same interpretation of the facts, he would as soon have asked, "Why kindle the fire under the pot, rather than elsewhere: for example, in the neighboring county, where fuel is less costly?"—as to put the question he suggests.

A second illustration of the same truth is to be found in a recent treatise on Political Economy by a distinguished American astronomer, the general trend of the author's views being in line with the classic science. Discussing the same question of the desirability of having the production take place at home, he treats it as "a question of the desirableness of industry in itself." "To decide the point," he proceeds to say, "it is necessary to make abstraction of everything but the industry, and inquire whether industrial activity is a good thing in itself. For example, if a man were to work in a foundry, and all the hammering, melting, burning, and labor went on without any iron being produced, or if these processes were all performed over and over again on the same iron, we should still have the same industry. The men would have the benefit of the exercise, and the managers would gain experience in organization."

It would seem to be as plain here as in the other case that our impressions respecting the vagueness with which the classic Political Economy sets forth its theory of wealth-production, are well-founded.

employment of its labor and capital in those industries, any more than in the case of the employment of John's capital and James's and Peter's labor in collecting and delivering what was *nil* before, and \$15.00 to them

Before quitting the subject of this last extract, let us note the resemblance between it and a late citation from Mill (see page) in respect of what we called its metaphysical flavor. By the way, that passage from Mill makes an excellent third member of the present group of illustrations, and we shall reproduce it :

—“As if not what a country obtains, but what it parts with in foreign trade, was supposed to constitute the gain to it.”

This seems to imply an absolute repudiation of the idea that the producing-operation signifies a creation of new wealth as an effect of which the performance of that operation was the cause.

In Mill's discussion of the question of the supply of capital, from which we quoted a passage in connexion with that subject (see page *supra*) he employs expressions which seem to indicate his adhesion to the *quid pro quo* doctrine.

—“What is laid out in the *bond fide* construction of the railway itself, is lost and gone ; when once expended, it is incapable of ever being paid in wages or applied to the maintainance of laborers again ; as a matter of account, the result is that so much food and clothing and tools have been consumed, and the country has got a railway instead.” *Principles of Pol. Economy*, IV., v., 2.

We may safely attribute to an accidental looseness of expression rather than to deliberate purpose the rather startling assertion made above that the money,—the concrete bank-notes and the coin—paid in wages, etc., could never again be applied to a like use. Passing this over, therefore, we come to the other statement, doubtless consciously and deliberately uttered, to the effect that so much food, etc., had been exchanged for a railway. This position, we say, was adopted deliberately, for he expressly mentions the business interpretation of the significance of the payment of wages, namely, that “it is a mere trans-

after, their enterprise. Precisely the same remarks are applicable to the American industries discussed above. Turn the matter over how we will, regard it from every possible point of view, we find it equally difficult to

fer of capital" [wealth, we should say] "from hand to hand"—a view of the matter which he characterizes as "absurd." Without undertaking to insist on it as beyond question, the most obvious and probable meaning of Mill's language, both what we have reproduced and the context, seems to be this; that the principle controlling ordinary exchanges between individuals—value for value—is equally applicable to the cases in which a nation obtains, through individual enterprise in pursuit of gain, an accession of new wealth. The accession does not signify an absolute growth in the nation's wealth. What is new has been acquired by exchanging for it an equivalent amount of wealth in hand: the increment is obtained by withdrawing an equivalent amount from the old stock.

Elsewhere, Mill's language frequently indicates gain as a result of the productive process. For example, the following:

"The growth of capital is similar to the growth of population. Every individual who is born, dies, but in each year the number born exceeds the number who die: the population, therefore, always increases, though not one person of those composing it was alive at a very recent date." (Ib. I., v., 6.)

Discussing the rapidity with which a vigorous community recovers from a great destruction of wealth, Mill, in the next succeeding paragraph, alludes to "the sterile astonishment" with which the unreasoning contemplate such phenomena, which they regard as exemplifying "the wonderful strength of the principle of saving, which can repair such enormous losses in so brief an interval. There is nothing at all wonderful in the matter. What the enemy have destroyed, would have been destroyed in a little time by the inhabitants themselves: the wealth which they so rapidly reproduce, would have needed to be reproduced and would have been reproduced in any case, and probably in as short a time. Nothing is changed, except that during the reproduction they have not now the advantage

escape the conclusion that no rational explanation can be suggested why wages or profits should be regarded as expenditures on the part of an industrial association which embraces alike the payers and the payees; nor justification invented for regarding a producing-association which exploits its own resources exclusively, as paying out, sacrificing, or in any sense parting with, the wages and the profits which it turns over to itself.

On the contrary, the economic phenomena of modern society, the enormous increase of wealth *per capita*, the sudden and amazing development of new wants on the part of the great mass of the population, can be accounted for in no other way than by the hypothesis of the genesis of wealth now for the first time formulated in express terms by the author of *England's Supremacy*, but always accepted practically as a matter of course by all who have ever contemplated the matter from a business point of view.

Is it conceivable that, if we could divest ourselves

of consuming what had been produced previously." Thus there is no call for any explanation of an extraordinary outburst of productive energy.

Surely, the consequences of the neglect of the verification-test could have no more striking illustration. For, to the business sense, what could be more provocative of indiscreet levity than the suggestion—for example—of the Greatest Thinker in England finding the explanation of the rebuilding of Chicago after the fire in a shortage in the hard-boiled eggs and bread-and-butter in the hod-carrier's dinner-basket, and the adoption of a cheaper brand of champagne by the Iroquois Club.

The contrast between Mill's theory and that of a sudden and unprecedented production of wealth being due to an equally sudden and unprecedented Demand is noteworthy; whether we regard the probability of the existence of the supposed facts or their adequacy, if existent, as an explanation of the phenomena.

of all our preconceptions, all our acquired habits of viewing this subject, and then take up the question,—“What does a nation pay for what it gets in the shape of the product of an industry conducted wholly by its own capital and labor?”—it would ever occur to us to so much as ask ourselves whether the earnings of its capitalists and its laborers can be reckoned as items of cost to the nation: whether their gains could be regarded as its loss? We can readily imagine the reverse view as suggesting itself. It seems highly probable that we should reason out the problem thus:

What the nation gets can be measured by what those of its members get who have taken a part in the work to justify a claim to a share in the result: in other words, the aggregate earnings of all the capital and labor employed, will represent the gross wealth-increment to the nation, and the remaining question will relate to the deductions to be made for the expenses incurred; thus arriving at the net gain to the nation from the enterprise. The choice would lie between this method and that of making the value of the product represent the gross gain to the nation: the net gain being determined by deducting therefrom the expenditures. Now it is inconceivable that, under the first of these two methods, the conception of the earnings of the producers being paid to them out of the resources of the nation should ever suggest itself. Under the second method, the notion that the wages and profits ought to figure in the same category as the materials used up in the operation or incorporated in the product, would not be so utterly beyond the bounds of probability, but its deliberate acceptance would seem to be so.

If this point is well taken, the classic position assumes for us the character of a survival of a creed outworn. It lingers because it is part of a system. *Per se*, it has no apology to offer for its existence.

CHAPTER II.

CONSUMPTION.

We have now reached that stage in our inquiries when it is in order to take up the more special discussion of the subject of Consumption to which we have already had occasion so repeatedly to refer. We have already stated (see page 183, *supra*), in general outline the leading features of the theory of this subject which we propose to substitute for that which may be said to be at present invariably taught and accepted wherever the authority of the classic Political Economy remains undisputed. The issue between the new hypothesis and the old presents a close analogy to that which at one time existed between the heliocentric and the geocentric theories of the solar system. In this case as in that, the difficulty in accepting the new doctrine lies less in its inherent abstruseness than in disengaging the mind from the influence of old associations. In both, the evidence of the senses seems conclusive in favor of the old belief until the continued occurrence of difficulties which it fails to clear up, make it possible for the rival hypothesis to get a hearing.

The case is one which presents a complex of varied and perplexing—because seemingly irreconcilable—phenomena. The classic system makes abstraction of the refractory facts and posits as an ultimate truth and

datum of its reasoning the incontestable proposition, "Production creates wealth : Consumption destroys it."* We accept the statement as true, so far as it goes ; but contend that when we come to subject it to the verification-test, we encounter phenomena which it does not explain, but which, on the contrary, give warning of the existence of something overlooked and call for a broader generalization which, while explaining these distinctive features, shall explain with equal clearness those residual phenomena for which the accepted theory fails to account. The hypothesis which we offer is this :

Wealth, as we have seen, is a combination of two distinct elements, each of them indispensable. These are, Utility and Scarceness. Production creates the utility : Consumption the scarceness. Each act of production destroys, *tanto quanto*, the scarceness : each act of consumption destroys, *tanto quanto*, the utility. Production and consumption together constitute a process of developing human well-being out of inert physical objects.

Let us now see how this hypothesis squares with some of the phenomena which refuse to conform to that theory of consumption which makes it signify wealth-destruction, pure and simple.

* It may be objected that we err in making the classic Political Economy present this proposition as embodying the whole of the subject, with nothing beyond. But although it is true that there are to be found in its literature vague suggestions of nebulous conceptions of something in consumption beyond simple destruction of wealth, these are too thin and unsubstantial to weigh against such practical facts as, for example, the contention that the sustenance of the labor is an element in the cost of production.

1. It is a generally-accepted remark of Malthus that there is no better measure of the prosperity of a country than the extent of its consumption. To the classic hypothesis this fact presents the problem. How can the best criterion of the perfection of the reign of Ormuzd be found in the ascendancy of Ahriman?

2. A territory of the United States newly opened to settlement is taken possession of by an agricultural population. Presently a manufacturing and urban population follows. According to the classic position, the consequences should be the same as if a swarm of devouring locusts had invaded the land. But instead of this, all is stir, animation, prosperity, wealth-evolution.*

3. An extraordinary cotton crop occurring at the time when an equally unusual excess remains over from the previous year, practically annihilates the profits of the American cotton planters for that season. To the classic economist the paradox is presented of a vast region impoverished by its production of an exceptionally large volume of wealth.

It is plain that the hypothesis which recognizes simply the destructive aspects of consumption, and stops there, is impotent to explain either of these familiar phenomena:—and their number might be increased, in

* It may be answered that the difference lies in the fact that the manufacturing towns pay for what they consume, whereas the locusts do not. But this simply sets the elephant upon the tortoise; it puts the problem off one remove, but leaves it as importunate for a solution as ever. It is true that the new consuming population pays for all that it takes: but what is the impelling force behind this sudden change in the material prospects of the community? The consumption of the non-producers.

definitely, were there any call for it. On the contrary, each of them presents no difficulty from the suggested point of view. In each of the cases, that which happens is precisely what we should, in view of our hypothesis, anticipate, under the circumstances. Even in the case of the cotton crop, which otherwise appears so perplexing, all is clear. It simply signifies that excessive production, as compared with consumption, has so far destroyed scarceness that, instead of wealth—utility *plus* scarceness—being increased, the second factor has been so greatly diminished that the sum of the two amounts to less than in years of lesser apparent wealth-production, when the factor scarceness was so much larger as to constitute a larger total of the combined factors.

These things lead us back to the analogy with the issue drawn between the rival solar systems. As the classic Political Economy points to the destruction of the utility of the wealth by consumption, so did the Ptolemaic astronomers point to the transit of the sun across the sky. In both cases one may say, "Will you not accept the evidence of your own senses?" And as the geocentricists could form no satisfactory explanation for the return of the sun each dawn to his rising-point, so the classic economist finds it impossible to reconcile his theory of consumption with such facts as we have instanced above.

The remarkably close analogies between Production and Consumption which have thus been brought to light suggest the application to the latter of that question of cost which has occupied so much of our attention in its application to the former. As in that case we had "to the good" the value of the physical

object, the product, and the problem to be solved was the offsets to its value in the shape of the things given for what was thus gotten ; so here we now have as the gross profit of the consumptive act, the physiologico-psychic product, the well-being, and our problem is the discovery of the offsets to its value in the shape of the things parted with, sacrificed, as indispensable prerequisites of securing that well-being. The solution is not hard to find.

In the case of Consumption, the unavoidable condition of the production of the well-being is the destruction of the wealth embodied in the object consumed. In our inquiries into the cost of production, we reached the core of the matter only then when we inquired, not what was the value of the sacrifices of the laborer and the capitalist, from the point of view of the employer of their labor and capital, but what was the cost of those sacrifices to the sacrificers. In the same way, the essential question to be answered here is the cost to the consumer, from the point of view of the consumer. He obtains the well-being at the sacrifice of the wealth. The well-being costs him the wealth he parts with to obtain it. But what is the cost of this cost? What does the sacrifice signify to him, in terms of well-being?

Suppose that instead of consuming that wealth, he keeps it. What does he gain thereby? Being wealth, it has no other possible value than for purposes either of exchange or of consumption. Suppose that there is nothing that he is aware of that he could obtain by exchange that could yield him any larger measure of well-being by its consumption than can the object in which the wealth in question is embodied. In that

case it is unavailable for purposes of exchange. Suppose further that there is no other time nor place—no other conjuncture of circumstances—than the present in which this wealth could yield to its consumer any greater satisfaction or advantage from its consumption. What element of cost to him is involved in his consuming it? It has no other value—excluding still the alternative of exchange—than its adaptation to the consuming-process. Unless consumed—in the sense of being destined to consumption, sooner or later—it is lost.* That is the trouble about wealth. There is much satisfaction in its possession—sufficient, as we have recently seen (page 298, *supra*) to account for the pains taken in its accumulation—but it has certain limitations not to be overlooked when we come to count the cost of consuming it. From what has just been said it is plain that when it is normally consumed—“normally” signifying “with the most judicious possible selection of time and place”—we have gotten out of it all that there was in it. Be it much or little, that is the best use that it can be put to. There is no element of loss, of sacrifice, in the transaction. On the contrary, the loss, the sacrifice, comes in when we fail to apply normal consumption. The product of production, wealth, is simply a cheque on the Bank of Well-Being. To realize, under normal conditions, the well-being through the consumption of the wealth, involves no more loss than the cashing of an ordinary cheque on an ordinary bank.

The fact is—though we may not have been in the

* Wealth in the form of money is, as will appear later (see page 331, *infra*) a thing apart, and is to be understood as not included in the present discussion.

habit of recognizing it as such—wealth may be likened to the oil in a lamp; the light evolved by the combustion of the oil representing the well-being which may be evolved from it by its consumption. We can have the oil at the sacrifice of the light, or we can have the light at the sacrifice of the oil. If we develop that light under circumstances that give us the maximum of advantage from its use, we are at the end of our string. Better than this we can not do. Natural law inexorably forbids. We have the light for a time, and then—neither the light nor the oil. In the morning we eat and are strong; at night we are faint from hunger. The food of the opening day has done all of which it was capable under the order and constitution of things. We can make no complaint, set up no bill of costs, against the consumption of that sustenance. It filled its contract, it performed its covenant. The grievance must be laid at the door of old *Edax Rerum*. It may prove difficult to serve a writ on him, but he is the responsible party in the case.

We are now in a position to recall our former discussion of the question (see page 239, *supra*), whether the sustenance of the labor in production should constitute a charge against the value of the product, when estimating the cost of production from the point of view of the nation. We perceive that the classic position on this question is due to a confusion of ideas in respect of the connexion of cause and effect, as between the productive act and the sustenance-expenditure. The classic economist reasons that since the act can not take place without the sustenance, the cost of the sustenance is a legitimate part of the cost of the act. But in arguing thus he overlooks the distinction between the

fuel charged into the fire-chamber of the steam boiler, and the food charged into the mouth of the stoker. Now there is a difference; and it is vital to the matter in hand. The fuel is not consumed unless the act is performed. Its consumption is an effect of which the act is the cause. The food is consumed, act or no act. It is an effect of which the act is not the cause. Such being the fact, there is no reason assignable why the cost of the sustenance of the laborer should be made a charge against an act which had no part in creating the necessity for the expenditure—an expenditure which would have been as imperative a necessity in the absence of the act as in its presence.

If it be suggested that the extra command of means conferred on the laborer by reason of his employment upon the act will be the cause of an extra amount of consumption on his part, the answer is plain. To base a claim against the value of the product, on the sacrifices made, the loss incurred, by the nation through the increased prosperity of its labor-class, is but to revive the old paradox.

It is further to be remarked that even if the act of production were responsible for the consumption of the sustenance of the labor employed therein, it would simply be responsible for a circumstance which, under normal conditions, involves nothing beyond a judicious exchange of values; a barter of a certain measure of wealth for its equivalent in well-being.*

* We are now in a position to understand the fallacy of Adam Smith's fundamental assumption that the interest of the individual must necessarily be the same as that of the nation of which he is a member. The cost of the home product and that of the imported equivalent are

determined for the individual on precisely the same principles in either case. He is a purchaser in the one as in the other, and in both alike must pay for the wages of the labor and the profits of the capital employed in the production of the object purchased by him. On the contrary, in the case of the nation, while a buyer in respect of the foreign article, it occupies, as regards the domestic article, the position of a producer exploiting his own resources. Thus it must pay the market price for the imported commodity, whereas, in acquiring the home-produced equivalent, it simply suffers such diminution in its resources in materials as may be involved in the productive process. Thus every individual of the consumer-class—in other words, every member of the nation—may have economic interests directly the reverse of those of the nation. (It is to be understood here of course that the remark applies only, as did Adam Smith's statement, to the several interests of the individual and the nation, having regard exclusively to the transaction reasoned of:—the purchase of supplies at a given time.)

CHAPTER III.

EXCHANGE.

The classic Political Economy has given so large a measure of its attention to the abstract principles of the system of exchanging the products of industry that we find little to detain us from entering directly upon the business aspects of the subject. The advantages to be derived from the application of the principle under proper conditions are, in fact, sufficiently obvious. We readily perceive that the institution is inevitable under the working of the Law of Diminishing Utility —may indeed be regarded as a species of production, of wealth generation, in view of the fact that when two parties exchange commodities of different sorts, each giving what is to him unutilizable surplus and receiving what satisfies a want, there occurs a double process of utility-creation. Again, the great principle of Grand-Scale Production (whose influence upon human progress we shall learn more fully to appreciate in our further investigations—see page 411, *infra*) must, in its earlier beginnings as described by the classic economists under the title of “the Division of Labor,” have constituted a familiar feature even of the most primitive examples of human social existence. Nothing further need be said, therefore, to quicken our interest in the subject or to convince us that our study of its phenomena must yield us valuable information.

I.—THE DIFFERENCE BETWEEN PURCHASE AND
SALE AND BARTER.

From our business point of view, the past is useful to us only in so far as it provides suggestions for the right understanding of the present, and we take up at the very outset the phenomena of Purchase-and-Sale by the agency of Money as the proper subject of our inquiries; those relating to Barter being made simply subsidiary to that study.

We pause for a moment to gather the significance of the illustration which the facts in this case afford us of that peculiar working of natural law whereby it sometimes seems that the ultimate results of a natural force are precisely the reverse of those to be anticipated *a priori*. It will be remembered that we noted the fact that the principle of inertia in the human constitution not infrequently assumes the rôle of a promotor of progress, through the circumstance of the best way of doing a thing being discovered to be the easiest way. Now we have a striking exemplification of this truth in the substitution of the money-system for barter. The special features of this interesting case will become more recognizable as we gather fresh proofs of the value of the change. The development of this subject will be the first thing in order for us here, for it would seem that, up to the present time, there has been no proper analysis of the phenomena of sale-and-purchase in contrast with the phenomena of barter. In consequence, notwithstanding the general recognition of the greater convenience of the former as compared with the latter system, the failure to bring out in a clear light the points of difference between the two has much confused

not simply the public mind, but also—as we shall have occasion to observe hereafter (see page 329, *infra*)—the mind of the scientific inquirer, in respect of some of the most important practical economic questions. Let us then take up this neglected subject and inquire how it is that the substitution of money-pay for goods-pay facilitates exchanging: what is the rationale of the operation. The answer would appear to be as follows:—The conditions requisite for the performance of a transaction in the nature of barter are much more numerous, complex, and difficult of assemblage in combined action than are those antecedent to a money-transaction. For barter, there must be a double set of correlating antecedents. In order that one sale be effected, there must be another correlated sale; in order that one purchase be made, there must be a second co-operating purchase. A cannot sell his surplus commodity until he finds B. B must be one who wants that commodity at a price that A will accept; and who has a surplus of the particular commodity which A wants to buy at a price which B will accept. Observe the complex of conditions necessary for the purposes of this transaction. Let us formulate the case as below, noting how the chances of their occurring in combination diminishes as the number of the requisites increases.

x signifies, “Has the article which the other party seeks.”

y signifies, “Has a surplus thereof.”

z signifies, “Is willing to trade at the other party’s valuation.”

Now in order that the barter shall take place, there must be $Axyz$ on the one side + $Bxyz$ on the other. $Axyz + Bxy$ will not answer. $Axz + Bxyz$ will

not do. Nothing will do short of the complete fulfilment of the requirements. Suppose next that the use of money has been introduced; what are now the requisites for the sale of A's surplus? The general use of money has made A's commodity "merchantable." There is a market for it. That market is B, and B is everywhere. Not only so, but it is also *Bxyz*, any time and always. Thus whenever A is A *z*—in other words, whenever a seller has a merchantable article for sale at the market price—all the conditions precedent are supplied. He sells.

Having thus grasped the conception of the manner in which this improvement on the barter-system operates to facilitate exchanging, there is no longer any difficulty in recognizing in this institution of an established medium of exchange an instrumentality so vital to wealth-production and its consequences that we readily accord to it the credit of having been one of the indispensable requisites of the evolution of civilization beyond a most primitive form. It becomes easier to understand how this cause must be given credit for a larger share in those effects, than to have anticipated the consequences which have followed the adoption of even the most surprising of the great mechanical discoveries, such as printing-types or the railway. Who could have predicted that the chopping-up of the block into pieces so small as to hold but a single letter each, should have resulted, in less than 500 years, in the production of the mass of reading-matter now sent forth daily upon the world? Who would have foreseen that the discovery that a smooth-faced wheel would not slip upon a smooth-faced rail would let loose the annual tidal-wave of grain and meat that surges eastward from

the trans-Mississippian regions of America,—to name but one out of the marvellous catalogue of the results of improved locomotion and transport?*

*The position of the classic Political Economy upon this subject is, by no means clearly defined. It would be inexact to hold it responsible for the extreme views of Mill, when he goes so far as to assert, by implication, that everything would have gone on in the world just as it has gone, if there had never been such a thing as a medium of exchange invented ; at the same time, the extent to which that system accepts Mill's views—as, for example, in adopting the deductions respecting international exchange which Mill has drawn from them as premisses—makes it necessary that we should surrender some time and space to the detection of their errors. The following extracts from his *Principles of Political Economy* will sufficiently indicate Mill's position.

“The difference between a country with money and a country altogether without it, would be only one of convenience ; a saving of time and trouble, like grinding by water instead of by hand, or . . . like the benefit derived from roads.” l. c. *Preliminary Remarks*.

“It must be evident that the mere introduction of a particular mode of exchanging things for one another by first exchanging a thing for money, and then exchanging the money for something else makes no difference in the essential character of transactions. . . . There can not, in short, be intrinsically a more insignificant thing in the economy of society, than money ; except in the character of a contrivance for sparing time and labor. It is a machine for doing quickly and commodiously what would be done, though less quickly and commodiously, without it.” l.c. III., vii., 3.

The view of the subject as set forth above, embodies two fundamental errors, as follows :

The first of these is to be found in what, to the business sense, appears as the engineering mistake of overlooking friction as a factor in the execution of movements. According to the underlying assumption here, a machine for reducing the diffi-

2.—THE DISTINGUISHING CHARACTERISTIC OF MONEY AS A PECULIAR FORM OF WEALTH.

The most conspicuous feature differentiating money from all other forms of wealth is the fact that whereas

culties attendant on the performance of a certain act, operation or process, may be successful in this, yet produce no results in respect of increasing the frequency or enlarging the scale of those acts or operations. Now, as already noted above, the facilitating of operations produces results far beyond what one would, on *a priori* grounds, conceive to be possible ; and it requires no deep nor prolonged research to discover that such a thing as making an act easier without the appearance of any phenomena traceable to it, is a thing unknown, unheard-of—an efficient cause without an effect—and, in the light of human experience, as little likely to occur, while human nature is what it is, as that water should flow no faster down a steep incline than down a slighter one. Could there, in fact, be a conception more purely metaphysical, unbusinesslike, than that which, if true, would make the vast movements referred to above to be nothing more than would have taken place—less quickly and commodiously, indeed, but just as surely—though no improvements in methods had been introduced : would make that vast annual delivery of Western products at the shore of the Atlantic to take place—less speedily and with greater inconvenience, but as assuredly getting there—by turnpike and wagon—nay, by pack-horse—nay, by carriers ?

The second error which we discover lies in Mill's conception of what sale-and-purchase amounts to, in real life. The vital premiss in the second of the above extracts is as follows :—What happens in the commercial transactions of the business world of to-day is this, that money is simply, literally, and only, a "medium," connecting two distinct transactions thus :—a thing, *a*, is first exchanged for money, and then the money is exchanged for something else, *b*. Thus, in point of fact, *a* and *b* are simply exchanged for each other. This, we say, is Mill's view—not simply of a case conceivable as possible under natural economic law, but—of what regularly takes place as

the latter are wealth by virtue of their dedication to consumption, money, considered simply as money, is wealth because it is not to be consumed. It ceases to be money the moment it is dedicated to consumption. Yet this difference has its limitations. The selection of the monetized metals as the physical substances in which to embody the purchasing-power of an accepted medium of exchange is due, among other things, to their natural adaptation to the requirements of durability, convenience of handling, and scarceness. But behind all this remains the fact that the most influential factor in the choice is the value of the physical substance considered as a commodity consumable in the arts. It is the transmûtability of the familiar substitutes representing money into money, at the pleasure of their holder, that gives those substitutes their acceptability. In like manner, it is the transmutability of the coin into a consumable commodity, that supplies a

the essential feature of ordinary trading. Now it is needless to take up time and space in proving that the nearest this conception comes to the facts of concrete existence is to be found in the fact that it *is* conceivable; but as to such a thing having ever happened, except by accident, it is out of the question: the laws of human motive forbid. In such a case, barter would be a method of doing more quickly and commodiously what might be done as Mill describes, but of course less quickly and commodiously. The reasoning, therefore, by which Mill arrived at his conclusion in this case, involves the assumption that what is rationally conceivable as a possibility under exceptional circumstances, may be accepted as accurately representing what actually occurs under all circumstances: a logical process which may, without exaggeration, be illustrated thus: —It is conceivable that a man—say on a wager—should ride with his face to the crupper; therefore men never ride otherwise.

physical basis for the purchasing-power imputed to and universally recognized in it. Two results of this money-inconsumability are to be noted, as follows :

A.—*The Influence on Demand.* The classic doctrine of the limitation of production by capital reduces the factor Demand to the position of a requisite of production which, though indispensable, can always be depended on to—in some way or other—present itself in adequate supply. But as soon as we range the facts in their proper order we recognize Demand as the factor to be sought; the supply of capital being sure to take care of itself if the Demand is of the right character. We then understand how great is the value conferred on money by the fact that it is the one inconsumable form of wealth. This is illustrated thus:

A, a gardener, exchanges a bushel of potatoes with B, a fisherman, for a bunch of fish. The two families respectively enjoy a desirable change in diet. This is the beginning and the end of the transaction. Consumption steps in to forbid any further extension of the exchangings and consequent consumings. On another occasion, A turns over to B another bushel of potatoes, but instead of taking his pay in goods, as before, he sells them to B for fifty cents. Now A can not eat the half-dollar, but with it he buys a garden rake from C, a hardware merchant. C can not smoke the silver, but he can and does buy with it a number of cigars from D, a tobacconist. D can not sweeten his tea with the coin, but with it he obtains ten pounds of sugar:—and so on to Z, and back again in an endless succession of demandings and supplyings, until the nimble fifty-cent piece finds temporary rest in a hoard, or disappears permanently from the category of money, either

by loss, as in a shipwreck, or by absorption into the raw material of the silversmith. In view of this power of money to perpetuate the physical existence of Demand, notwithstanding the consuming process, we recognize a special desirability as compared with the other forms of wealth.

B.—*Its Enduring Character.* Aside from its value as influencing Demand, its comparative indestructibility distinguishes it favorably from many forms of wealth. That is to say, its function as a perpetuator of Demand is one thing, its quality as a kind of wealth which will endure while most kinds perish in their utilization, is another. To make the meaning plainer here it will perhaps be well to explain that reference is had to a truth which has an important bearing upon certain business questions of national policy as regards both domestic and foreign trade, and which can probably be made easier of comprehension if presented by means of an illustration, as follows :

Suppose a community to expend a million dollars within a given period in the construction of public works of enduring value, and another million in articles whose consumption yielded, on the whole, no marked balance of advantage or disadvantage as regards its effect upon the welfare of the consumers. In both cases alike the money expended purchased its full equivalent according to the values recognized at the time ; but at the close of the period there was something to show for the expenditure in the one case, but in the other—nothing. Let us now apply this principle in the sense alluded to above. Suppose a nation, during a certain term, to import to the amount of a

million dollars, certain articles of luxury which, considered in respect of the ultimate results of their consumption, exhibit no notable preponderance of either benefit or injury. At the close of that period it has exported the million dollars in money in payment for the luxuries in question, and has nothing to offset that shrinkage in its resources. It has exchanged a more-enduring for a less-enduring form of wealth, with the ultimate results stated.

3.—THE MANNER OF THE DETERMINATION OF THE PURCHASING-POWER OF MONEY.

Since the ultimate basis of the value of money is the value of the physical substance composing it, regarded as a commodity, the chief factor in the determination of its purchasing-power is the existing ratio of the supply of the metal to the demand for it. This looks simple enough in the abstract, but in the concrete, so complex are the influences which determine the actual volume both of the demand and the supply, that there is probably no one subject, excepting that of meteorology, on which human foresight has proved so deplorably helpless as on that of the movements of the world of finance. The economic history of the past is full of the most surprising experiences. For example, the enormous deluge of gold from California and Australia, commencing near the close of the first half of the present century, and continuing year after year, would naturally be expected to exercise a profound influence on prices. Yet the actual results were small out of all proportion to this anticipation. The phenomenon establishes beyond question a relation of cause to effect as between the increase of the supply of, and the in-

crease in the demand for, money: the hidden principle operating, in the case of the Californian and Australian gold, with such energy as to baffle, as we have said, all calculations. But the principle in question has already been explained. It is to be found in the enormous expansion of productive enterprise due to the stimulating influence of the influx of the new supply of capital, and the consequent absorption of a large part thereof.*

But here the question arises:—“If it be so that a sudden increase in the volume of available capital produces a large increase in productive enterprise, what becomes of the proposition that there always exists in each advanced modern industrial nation a supply of wealth standing ready to capitalize any new industrial undertaking that can insure extra advantages to the investor, whether in increased profit or in diminished risk as compared with the customary figures, or in both of these? The answer would seem to be this:

The act of investing capital in production is due to the concurrence of two circumstances, to wit., (1) the possession of the wealth; (2) the state of feeling in its possessor which produces a preponderance of the expectation of gain over the instinct of caution. Now

* For a typical example of metaphysics applied to business purposes, see the argument against the existence of this “stimulating” and “absorbing” principle presented in Cairnes’ *“Logical Method,”* Lecture V. § 3. In this the author concerns himself wholly with the insufficiency of the reasoning by which certain writers have undertaken to account in this way for the comparative impotence of an increase of over three hundred per cent. in the annual gold-supply to enhance prices. The circumstance that the fact of such a comparative failure is incontestable counts for nothing in the discussion.

man, by virtue of his sympathetic nature as a gregarious animal, is profoundly influenced by the psychic atmosphere of his environment. The individual is "carried away" by the current of enthusiasm which is sweeping along the community about him. "The spirit of enterprise," once fairly abroad in the land, becomes a prevailing epidemic. Again, a portion of the new wealth falls into the possession of those who were never lacking in the spirit of enterprise, but who until then had been deficient in the means of giving effect to their adventurous propensities. Thus the influx of the new money supplies the previously-existing deficiency, whether in the disposition or in the ability, to capitalize industry. This brings into view another topic to which a word should be spared in passing.

It is surprising, when we come to consider it attentively, how little heed has, as a rule, been taken of the extent to which the great financial revulsions which from time to time still keep catching the civilized world unawares, are due to mere blind, unreasoning, impulse on the part of a multitude. Yet the phenomenon can not, unfortunately, be considered a rare one, nor is this explanation difficult of discovery. The commercial and industrial world operates, for the most part, not on a money-basis, but on a credit-basis; credit being a mere matter of changeful impression; and although "the multitude" in this instance is one drawn from the more intelligent and stable-minded of the population, yet is it a tenderly-anxious body repeating its cherished possessions, and hence open on occasion to senseless scares. Such being the facts, we should, when these surprises occur, impute less of blame to what we call the shortsightedness of our financial leaders and more of it to the

mobility and limited intelligence of the droves that are so ready to make a rush for the precipice whenever a stampeding incident occurs. It is too much to ask of human foresight that it should be able to reason with accuracy and precision respecting the reasoning of the unreasoning. But those leaders overlook something vital when they forget this themselves.

That which particularly interests us at present, however, is a matter respecting which all is clear and straight. The phenomena in this case admit of but one interpretation, and that one is obvious to every systematic investigator. The matter referred to is the question of the arena in which the purchasing-power of the money in a country is determined; that is to say, whether this adjustment to existing conditions takes place within the limits of that country or in the general Exchange and Bourse of the intertrading nations.

The case here presents many points of coincidence with that of the Limitation of Production by Capital. The phenomena are so obvious in their significance, so inexhaustibly numerous, that it has required the authority of a strongly-entrenched scientific system to create any grounds whatever for mistaking the truth of the matter. The arena in question is that of the world at large. Not only does the every-day experience of every centre of trade and finance, the world over, furnish phenomena incapable of explanation upon any other hypothesis, but we are able also to define the causes of which this condition of things is the effect. This work is, in fact, already performed for us by the classic economists. For example, Mill in his "*Principles of Political Economy*," has the following, among other things, to say on the subject:

—"howsoever capital may increase and give rise to an increased production of commodities, a full share of capital will be drawn to the business of producing or importing money, and the quantity of money will be augmented in an equal ratio with the quantity of commodities. For if this were not the case, and if money therefore were, as the theory supposes, perpetually acquiring increased purchasing-power, those who produced or imported it would obtain constantly-increasing profits; and this could not happen without attracting labor and capital to that occupation from other employments."—Book IV., chap iv., § 1.

Cairnes ("Leading Principles," II., ii., 9), while contending against the doctrine that the purchasing-power of money is settled on cosmopolitan principles (or, as he puts it, "that the value of gold is and must ever be the same, all the world over") concedes the soundness of the proposition that, as regards the great staples of commerce, their prices can not vary much in different localities; that, as a rule, the difference in prices will not be greater than the cost of carriage between the countries of production and consumption. Now if we apply this principle—and there can be no rational objection to this—to the case of "securities" transferable, in respect of their ownership, by cable message, and hence without appreciable expenditure of money or time because of the distance between buyer and seller or of difference in nationality as between them, we can understand why a difference in the purchasing power of normal money as between two inter-trading countries must inevitably set in action forces which will restore the equilibrium without appreciable lapse of time. In point of fact, as the reader will no

doubt recall, all that Cairnes contends for in opposition to the sweeping assertion that the value of gold is the same all the world over, is this : that there is a class of goods, too important to be overlooked, which, through unsuitableness for distant traffic, or owing to some other obstacle, do not enter into international trade, and hence may exhibit wide divergences in gold-price. His objection, therefore, to the doctrine he quoted has no bearing against the proposition that there obtains a process of equalization of purchasing-power through the purchase and sale of articles of international trade, which maintains the value of money in substantial equilibrium throughout the intimately-intertrading nations. A systematic study of the related phenomena will establish the conclusion that a proper illustration of the case would represent the various nations as so many separate reservoirs of a fluid (the purchasing-power of money) all of them communicating together by subterranean conduits, so that a rise or fall of level in any one will effect—with greater or less rapidity according to the freedom of flow in the conduit concerned—each of the others; with the final effect of establishing an equilibrium at a new common level.

4. INTERNATIONAL EXCHANGE.

When we come to inquire into the principles which should guide the statesman in the regulation of International Trade, we find two different lines of investigation to be pursued. Our first business is to ascertain the *raison d'être* of the system. What is the good supposed to be derived from the practice? As regards Consumption, it is employed for the purpose of providing things not otherwise attainable at all, or attainable

only at a greater sacrifice than need be made under this method. As regards Production, the object is to increase it. For the same reason that exchanging among the members of a single small tribe or neighborhood expands the volume of wealth-creation therein, does a trade between the different provinces of the same nation expand the volume of wealth-creation in each of the parties to such intercourse, and consequently in the nation which is the aggregate of these provinces or subdivisions. Reasoning *a priori* from the analogy between the cases, international trade should do for the several intertrading nations and for the race at large—that is, for so much of it as belongs to this intertrading category—what domestic trade does for the nation and its intertrading parts:—it should add to its production due to domestic demand, a fresh increment of production due to the foreign demand. When, however, we come to submit this conclusion to the verification-test, we immediately discover something overlooked that we can not afford to let remain so. In the absence of disturbing causes, demand gravitates to the producer who can offer the strongest inducements to the demander. Hence, when a nation seeks foreign trade with a view to enlarge the volume of its production, it must bear in mind the fact that foreign nations will seek in it what it aims to secure in them; and that, should there be nothing to disturb the natural working of things, the question as to which nation will secure the demand will be determined by the fact as to which one can deliver the commodity in question at the point desired by the demander, on terms the most satisfactory to him. This circumstance necessarily complicates things. Were it the fact that the interests of the

individual demander (assumed here to be identical with, or as representing, the consumer) and those of the nation to which he belongs were the same, the complication would be more an abstract than a real one; but we have already learned that this is not the case. The question, therefore, of the principles on which a nation should regulate its foreign trade, must be worked out with careful reference to what we have already ascertained respecting the nature of wealth, its production and consumption; depending no further on the seductively simple and ready solutions afforded by *a priori* deductions than to supply suggestions which may put us on the scent of an obscure principle. Accordingly, we now proceed to the study of the phenomena relating to the process of exchanging, as performed among the modern intertrading nations. There has been such an amount of metaphysical acumen devoted to this subject that it is difficult for the well-informed economic investigator to comprehend the business view of the matter, because of its extreme simplicity. Let us see what we can do to overcome this difficulty.

When either or both the parties are not familiar with the use of money, barter is employed in international exchange. Again, when there has prevailed a condition of things such as that in the trade between Great Britain and her American Colonies, when the same vessel sometimes took over a cargo of tobacco, etc., and returned laden with the goods that had been purchased with the proceeds of the sales of the Virginian products, the detailed transactions might, without violence to the facts or suggesting false analogies, be generalized as resulting ultimately in a practical exchange of goods for goods. But in no shape or form

can the principle of Barter be recognized in the existing method of trade between individuals belonging to different nations, with a single comparatively insignificant exception, as follows:

When the people of the United States purchase twenty millions of dollars worth of tinned plate in South Wales, one of the results of that purchase will be the purchase by the Welsh population concerned, of flour, petroleum, and other American products, to whatever extent those commodities may be embraced in the consumption resulting from that inflow of new means, *provided* the American article can, in such case, undersell the rest of the world in the Welsh market. To this extent does barter still have a place in modern international trade:—to this extent, no more. Beyond this, the simple is the actual ; the obvious is the true. Things, in this instance, are in essence what they are in appearance. But so firmly has the doctrine that international trade is, in final analysis, a barter of goods for goods become established in the mind of every one whose education has included the least smattering of Political Economy, that no amount of pains should be thought too great that will result in its disapproval. To this effort, therefore, let us now address ourselves.

We will imagine a typical case of modern international trading. M, a cloth merchant in New York, buys \$1,000 worth of woollen goods from N, a manufacturer in Leeds, England. When he wishes to pay the bill, he buys of a broker in New York a Draft on London for \$1,000, drawn against a shipment of wheat from Chicago to Liverpool. May we not then say that England has bought \$1,000 worth of wheat from America, paying for it in woollen goods? From a meta-

physical point of view, this is an altogether unobjectionable generalization, and one not without its merits. Like many other abstract propositions, it presents an aspect of the matter pleasing for its novelty when first broached, and with possibilities in the way of suggesting ideas that may be worth working out. But, to the business sense, to introduce such a conception into reasoning upon business problems is simply to dig a pit for the unwary. In order to get at the real object of our search, to wit., the distinction between this pair of transactions in wheat and in woollens, respectively, and a case of genuine barter, we must inquire what are the features not found therein, which should characterize these dealings in order to establish the required degree of analogy between them and a case of the barter of \$1,000 worth of wheat for an equivalent value in woollen goods. Let us go back to the facts:

M had occasion in the course of his business to buy cloth. The offer which he had from N was the best within his knowledge at the time. His motive, then, is readily discoverable. It is all plainly set forth in this account of the facts. That is all there is in it, and that is all, in a business sense, that can be made out of it. We may dismiss the discussion of N's motives with equal brevity. Obviously, too, we need waste no space on the reasons impelling the shipment of wheat from Chicago, whereby the value was imparted to the draft which figures in the case. Now what changes are requisite in order that these transactions should be brought to a shape that would justify the use of them in reasoning as if they were, actually and veritably, of the nature of a barter? What would make them a real case of barter—an actual exchange of goods for goods?

M must buy the cloth because N will accept the wheat in payment for it: N must buy the wheat because M will accept the cloth in payment for it. This is the only way in which can be fulfilled a certain condition indispensable to a barter, to wit., that the importing and exporting should together constitute a single reciprocal operation. Each party must buy BECAUSE he sells: each party must sell BECAUSE he buys. The buying and the selling are correlated as cause and effect. Otherwise stated, M's purchase of the cloth must CAUSE the purchase of the wheat. Instead of such relation of cause and effect, what do we find? Take one of the parties, M. Did he inquire beforehand how much wheat the compatriots of N were buying? Did he ascertain how much the whole United Kingdom was buying of American products of all kinds? Did he even ask as to the balance of trade between the countries, any further than to ascertain the rate of premium or of discount on exchange on London, in order to include the result in his estimate of the cost of the cloth? Of course not. On what possible grounds, then, can it be maintained that we may adopt the assumption that the wheat is shipped as the result of the importation of the cloth, or the cloth imported because of the exportation of the wheat?

Perhaps it may be answered that the ultimate arrival at a condition of things which can be legitimately regarded as a settlement on the basis of Goods for Goods, must inevitably be secured by the operation of the Law of the Equation of International Demand. But a reference to the note on page 373, will furnish sufficient reason for the conclusion that nature recognizes no such law.

On the whole, therefore, we conclude that the obvious, common-sense, business, view of the subject is the truly systematic and hence scientific one; and that purchases and sales between individuals on opposite sides of a national boundary are based upon the same play of motive that controls them in the cases when buyer and seller are both on the same side thereof.

Our investigation of the laws of Production enables us—in view of what we have now learned of the soundness of the business conception of international trade as no barter, but, on the contrary, actual purchase and sale—to give a satisfactory explanation of a certain economic phenomenon, which may be described thus:—

The other progressive nations, struck with the exceptional growth in wealth exhibited by England, and failing to see that it was due to her exceptional productive power, have for a long time sought to follow the precepts of her economic science. They have been straining on their tether, as it were, in order to “loose the latest chain from growing commerce,” and restore to “freedom of contract” the rights of which an unscientific “paternalism” had deprived it:—in short, by accepting England’s explanation of England’s supremacy, to realize, themselves, England’s results. But with every attempt the tether still refused to be stretched overmuch. To change the simile, each of those nations has been and is like a turtle that no sooner puts out its head from under its protecting carapace than it gets a rap on the neb that induces a hasty retreat under cover again. The explanation of the depression immediately succeeding each pronounced reduction of duties on an extended scale as regards the volume of the imports affected thereby, offered by the “mercantile school”

and by Ricardo in his defence of his barter theory,—as will be set forth more at large in the subjoined note—is as follows :

The continued export of gold in payment for the goods imported, makes money scarce, and thus depresses the value of everything else, and at the same time makes the supply of capital inadequate for the proper maintenance of productive industry. But we perceive that, although the depletion of the country's resources in gold may, in a certain sense, be regarded as the cause of the depression, it is not in the way supposed by the Mercantilists and Ricardo in the instance just referred to. From the knowledge that we have acquired of the circulating mechanism of industry, we understand that a necessary link in the chain of the cycle of the money-movement is the movement from the treasury of Capital to the pockets of Labor: a movement suggestive of that of the blood throughout the capillaries of a mammal—diffusing the money throughout the body of the population, only to flow back again to the receiving-and-distributing organ, whence the systolic impulse of Demand sends it out upon its round again. It is plain to us, therefore, that it is the surcease of Demand that is the direct and immediate cause of the depression succeeding its transfer from the home to the foreign industry; the scarcity of money being due, *tanto quanto*, to the arrest of its diffusion through the community.

This explanation relieves us of a dilemma otherwise unavoidable. According to our system, capital is always available for any industry that can show valid reasons for asking for it. "But how," it could be asked, were we to adopt the mercantile doctrine respecting the

effect of the diminution of the stock of money in the country, "can it be that trade is depressed and values disastrous because of the scarcity of money; and yet there is at the same time plenty of money available for profitable enterprises?" The perplexity vanishes when we reply that it is not the scarcity of money that is making the trouble, but the scarcity of demand. As regards industries already established, they are always pushed to the extent that is profitable, no matter how "hard" "the times;" and, as regards new industrial enterprises, there is, combined with the slackness of Demand, the contagion of timidity, of distrust—so significantly styled *panic*—which settles upon the entire community at such a time like a brooding darkness.

Having thus disabused our minds of the misconceptions relating to the barter-element and the cause of the depression following upon a transfer of Demand from the domestic to a foreign industry, we have a simple and easy task in the formulation of the positive precepts of our business science on this cardinal point of the nation's action in the regulation of its foreign trade. We perceive that the aim of its legislation should be to secure for its industries the largest measure of Demand that the economic laws which it is the function of our science to expound, will admit of. We are thus led up to the inquiry into the nature of such of those laws as have a bearing upon this subject.*

* Perhaps we cannot do better in approaching this extremely complicated and difficult theme—to wit., the doctrine of the classic Political Economy upon the subject of International Exchange—than to follow the arrangement adopted in the text in the exposition of the business theory of the subject, and direct our attention to the classic theory, first, of the *raison*

5.—THE PURSUIT OF DEMAND.

Production being recognized as wealth-creation, and Demand as the motor force in Production, the problem for the business economist, in connection with the

d'être of the institution of international trade, and, second, of the rationale of the process.

What, then, are the advantages supposed, according to the classic view of the subject, to result from the practice? It cannot be the enlargement of production, for that, the classic Political Economy insists, is beyond human power to accomplish. Mill speaks of it thus:—"Setting aside its enabling countries to obtain commodities which they could not otherwise produce at all; its advantages consist in a more efficient employment of the productive forces of the world." (*Principles of Pol. Economy*, III., xvii., 3.) Another abstract view of the matter to be inferred from the general trend of classic discussion of related subjects may be thus expressed:—the minimizing of human sacrifice on the part of the laborer in respect of the exercise of his faculties, and on the part of the capitalist in the shape of abstinence for the accumulation of capital.

As regards the question of Cosmopolitanism *vs.* Nationalism (special regard for the interests of one's own nation), the great masters of the classic system do not deal with it specially and deliberately:—apparently seeing no reason for broaching the question. Nor, indeed, would there seem to be such when there is, as we have seen (page 307, *supra*) no specific treatment of the question whether there is any gain, any increment of wealth, evolved through the productive process; or whether it is merely an exchange of one description of values for an equivalent in values of another description. There is of course no occasion for inquiry as to who shall receive the gain from an operation from which no gain is to be derived. In the general literature of the classic system, the tendency, when any allusion is made to the subject, is toward cosmopolitanism, but it is not necessary for the purposes of this essay, that we should devote any further space to it here, seeing that the grounds for the positive advice given by the classic Political Economy respect-

subject of international trade is, how to regulate the latter so as to secure the maximum of demand for the nation's industries. Two methods are open to our choice. The government policy may be shaped with a

ing legislation upon international trade, are drawn mainly from its doctrines concerning the other branch of our inquiries, to wit., the question of the rationale of the process of exchanging as between nation and nation. To this latter, therefore, we now direct our attention.

Here we naturally expect to find the most interesting passage in the entire range of our study of the classic Political Economy. The one great, paramount, feature of that system from a business point of view being its doctrine of Free Trade, we await with more than ordinary interest the results of our investigations into the reasoning by which it considers itself to have established this cardinal principle. In view, therefore, of the fact that the data of this reasoning are found in its theory of the operations which constitute international trade, we now turn with wide-awake curiosity to the analysis of the classic position on this subject.

We need not remind the reader that the classic position in a nutshell, is this:—that international trade is, to all intents and purposes, Barter. But we do not penetrate beyond the merest preliminaries in the way of details, before we encounter the fact that there are two distinct interpretations of this general proposition, both of them upheld by the entire hierarchy of the prosecutors of the classic system from the days of Ricardo, though they are expressly contradictory, the one to the other, even to mutual destruction:—and, withal, the one and the other—if there is any virtue in our method of detecting the Something Overlooked—are equally erroneous.

The first of these theories of the character of international transactions is set forth by Adam Smith. We need go no further for an example than one of the extracts from *The Wealth of Nations* already brought to our notice by Cairnes. (See p. 145, *supra*.) It is this:—

“If a foreign country can supply us with a commodity

view to obtaining the trade of other nations, or to developing consuming-power among its own people. As will be recognized later, the adoption of either of these involves the abandonment, or at least the com-

cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage." There can be no question as to the author's meaning here. The kind of barter which he must have in mind is of that direct and absolute character which necessarily involves the idea of an exchange of goods between two individuals, each of whom has a surplus of that which the other wishes to obtain, and hence an exchange in which each commodity is sold because the correlated commodity is purchased, and each one purchased because the corresponding one is sold. It does not seem possible to suggest any other way in which the transaction which Adam Smith recommends, could be brought about. "Better buy the foreign commodity with some part of the product of our own industry." But how go about it? Goods are purchased because the article in the case is more desirable, in the mind of the purchaser, than what he must part with to obtain it. We can readily understand how a statesman may plan to build up a trade in a certain product of his country by measures which will enable that country to undersell all others: but how is he to induce a barter of the product for some product of another country? We can see how to induce a purchase; but how induce a barter? What motive is there, to which an appeal can be made? A reference to the discussion of this point in the text seems to leave nothing for it but to accept the conclusion that Adam Smith's interpretation of the facts of real life is, in this instance, a mistaken one. Mature consideration convinces us that it is simply an assumption: an assumption without a basis. Language so positive respecting one of the great cardinal principles of the philosophy of the founder of the generally-accepted economic science can be justified only by the most conclusive evidence; but this, it is believed, can now be produced, as follows:

The virtue of a science of practical life consists in its ability

plete subordination, of the other. (See page 369, *infra*.) As a rule, whatever makes for the one, mars the other. Our first inquiry, therefore, should be respecting the comparative advantages and disadvantages of each.

to declare in advance what will occur under certain given conditions. In economic science, the great resource in predicting the results of certain conjunctures of circumstances is the reference to certain few and simple propensities of human nature. Thus the work of economic investigation is—after the assemblage of the data respecting the conditioning circumstances—a study of human motive. [This point suggests an explanation of Mill's singular lapse respecting the subject-matter of his science. His habitual acceptance of his facts at haphazard, taken in connexion with his subsequent painstaking elaboration of details in working out the play of human motive in the case, gave color, in his mind, to his unquestioning acceptance as a fact of the proposition that economic science concerned itself with the study of human motive exclusively. The remarkable oversight involved in this position must of course retain its conspicuousness as an error, but the wonder of the incident is modified by the discovery of the trap into which he fell.] Thus Cairnes, in commenting upon Adam Smith's method of establishing a doctrine, says, "he first lays the foundation deep in the principles of human nature," etc. We are therefore entitled to ask of the author of the advice, "Better buy the foreign commodity," etc., "On what principle of human nature do you base the expectation that your recommendation can be carried out? There is no way conceivable save in a case in which goods are bought because they can be paid for in goods of which the buyer has a surplus; and this, most assuredly, is not the method of modern trading, international or otherwise. In order that goods be traded for goods, in the way your advice contemplates, the transactions must be between goods-holder and goods-holder. So long as you are unable to connect the proposed action with any motive on the part of the individuals on whom the proposed movement depends, your assumption that the movement must take place

Which system has the sanction of natural law? Under which shall we be rowing with, under which against, the stream?

is unwarranted." Surely, there is nothing objectionable in this?

But if Adam Smith overlooked the fact that he had in this case neglected what he elsewhere recognized as essential for the transformation of an assumption into an established principle, Ricardo did not. In consequence, it is to him that we owe the second of the theories of the nature of international trade referred to above. Let us endeavor, in what follows here, to do exact justice to this most singular, weighty, and intricate, case.

Ricardo *loquitur*. "It is true that it is a mistake to conceive of international trade as consisting of a direct and immediate exchange of goods for goods. Every transaction in commerce is an independent transaction; and if there be a prospect of profit on the export or import of any single commodity, that commodity will be exported or imported, wholly irrespective of what may be the state of the market as regards other commodities. It is impossible, therefore, to establish out of these facts alone, the existence of a human motive insuring an actual interchange of goods for goods. The motive observable here leads to the purchase of goods with money; and this is the only cause assignable for the immediate movement. But this is not all of the case.

"The motive for the immediate movement, to wit., the purchase of goods in a foreign country, is supplied by the fact that that country is a better one to trade in. The consequence is a flow of goods into the purchasing country. Now, the flow of goods back again—which is the process by which the ultimate barter or goods-for-goods transaction is secured—is produced by the same motive as was the original flow. The question then is, How is the cheaper country made the dearer one, and *vice versa*? This is a consequence necessarily flowing from the original transactions. The operations of natural

A.—COMPARATIVE EXTENT OF THE FIELD OF ACTION.

Here the first impression will be the reverse of our ultimate conclusion. Our first impulse is to set up the aggregate population of the rest of the world against

law by which this change is brought about can be explained as follows :

“Let us suppose two countries, A and B, which,—for simplicity of illustration—trade exclusively with one another. A is the country of relatively superior, B of relatively inferior, productive power in the sense that certain commodities suitable for international commerce are so much lower in A than in B as to yield a profit to the trade of buying them in A and selling them in B. Nothing more than this is necessary in order that transactions of this nature shall take place. Thus far, all is plain. The movement is fully explained by reference to the ordinary propensities of human nature.

“But each of these commercial transactions, though independent in the sense of being undertaken without reference to any transaction beyond itself, nevertheless entails consequences which connect it with subsequent transactions. According to our hypothesis, A exports goods to B, in exchange for which B exports goods to A. Now it is evident that the trade can not be carried on permanently upon the terms of an exchange of a commodity on the side of A against gold on that of B; for the continual transference of gold from the latter to the former country would sooner or later act upon prices in the two places, lowering them in B and raising them in A. This expansion of values in A and shrinking of the same in B can have but one ultimate effect, namely, to transfer from A to B the superiority in productive power in the sense that it will pay to export goods from B into A. This being accomplished, the same motives that sent goods from A into B will now send them from B into A; and this is the sense in which the classic doctrine that international trade is a barter of goods for goods is to be understood. Accepting this interpretation, the demonstration is now complete. It is made in accordance with the ordinary principles of economic science. The expectation that

that of the particular nation which concerns us ; as though the amount of demand *available* to any one nation were proportionate to the number of inhabitants in the contrasted areas, irrespective of other considera-

each movement predicated will take place is based upon the established principles of human motive, thus :—To begin with, it has been shown that international trade comes into existence when there is gain in carrying it on. This is the explanation of the first step. Next, the transactions thus inspired suffice, under the working of natural law, and without the intervention of conscious human action in aid of the operation, to bring about a condition of things under which the same motives which caused the transfer of goods in the one direction, now cause their transfer in the reverse direction. Thus all is explained on scientific principles. Contemplating the entire cycle of movements from a comprehensive point of view, we see that what the classic proposition that international trade is in essence barter, means, is this : that, neglecting the intermediate phenomena, the entire phenomenon, in its ultimate aspect, is an exchange of goods for goods : and that this proposition is true.”

The above is an abstract of Ricardo’s argument as presented by Cairnes as an improvement on Mill’s improvement on the originator’s own elucidation ; that of Cairnes being selected as the most business-like of the three. Even here we are obliged to get the points of Ricardo’s theory of the subject in hand, by picking them out as they incidentally, as it were, turn up among others in the discussion of a different subject, to wit., the principle that international trade is governed by comparative cost of production. In order that the facts respecting the accuracy of this representation of the classic exposition of the subject may be in plain sight before the reader, the text of Cairnes’s version is herewith subjoined, *verbatim* : the insignificant with the pertinent, from beginning to end :—

“ In the first place, I must observe that cost of production, though it may be, and generally is, the ultimate condition governing international exchange, is never in any case the

tions. But we shall come to understand that the question is not to be settled on such grounds, and that in the case of any of the Great Powers, its home market is much the larger of the two.

proximate or immediate cause. That proximate and immediate cause is not cost, but price. The ordinary merchant whose business leads him into foreign trade knows nothing of 'cost of production,' as consisting of labor and abstinence, and still less does he know of 'comparative cost of production.' The considerations which determine his conduct are far more simple. He attends, not to the cost—the expenditure of labor and abstinence—at which commodities may be produced, but to the prices at which they may be bought and sold, and the only comparison he enters into is a comparison of the prices of the articles he deals in as they are in his own country and in the foreign market with which he trades. When the state of prices in these different localities is such as to render it profitable to transport commodities from one to the other for the purpose of sale, he engages in this operation and looks no further: when the state of prices does not admit of this, he ceases to operate. Further, as Ricardo himself pertinently reminds us, 'every transaction in commerce is an independent transaction'; and if there be a prospect of profit on the export or import of a single commodity, that commodity will be exported or imported wholly irrespective of what may be the state of the markets as regards other commodities. How are these facts to be reconciled with the theory expounded in the last chapter, that international trade is governed by comparative cost of production? Ricardo's answer would run in some such form as this: first, he would say, by virtue of the fact that relative prices within each country correspond to, and vary with, the relative costs of commodities produced within that country; so that a state of relative prices which would make it profitable to export certain commodities and import others would indicate a corresponding condition of the relative costs of production of the commodities thus exchanged. And, secondly, he would meet the difficulty as to the independent character of each commercial trans-

B.—EFFICIENCY OF THE MOTIVE INSPIRING THE PURSUIT OF PRODUCTIVE POWER.

In our study of selfishness we learned that, as a rule, the lower the order of the passion, the greater its

action by showing that, though independent, in the sense of being undertaken without reference to any transaction beyond itself, each commercial transaction entails consequences which connect it with subsequent commercial transactions. The case may be illustrated by a hypothetical example. Suppose the price of some commodity suitable for international commerce to be lower in country A than in country B—I assume the difference in price to be sufficient to yield a profit on the investment during the period between purchase and sale, and I put aside, for simplicity of illustration, the element of cost of transport—nothing more than this is necessary in order that the commodity should be sent from the former to the latter country. It will accordingly be sent; and the merchant who undertakes the transaction will get his profit. But this is not the end. The commodity being sold, its value must be transmitted from country B, in which the sale took place, to country A. The question arises, in what form will it be sent? If it be sent in the form of some commodity produced in country B, the price of this commodity, to make the transaction profitable, will need to be lower in country B than in country A. The former commodity was lower in country A than in country B: the latter will be lower in country B than in country A. The comparative prices of the two commodities will therefore be different in the two countries, and, prices being ruled by costs, the transaction will only be profitable when the comparative costs are different. But country B might pay for its import, not by the export of a commodity of its own produce, but by remitting gold. Let us consider this case. There are two suppositions possible. Country B either produces gold or it does not. If, taking the former supposition, and assuming therefore that gold is for country B a staple of merchandise, the gold price of the imported commodity is higher in country B than in country A—this proves that the cost of obtaining gold

efficiency as a spur to action. This principle comes out conspicuously in the case in hand. The nation aspiring to secure the demand of the rest of the world, feels all the inspiration of true animal greed for the

is lower relatively to the cost of the commodity in the former than in the latter country. There is thus a difference in the comparative costs of gold and of the commodity in the two countries, and the trade would be carried on by an exchange of one for the other in strict conformity with Ricardo's doctrine. But now take the other supposition. Gold, we will suppose, is not a product of country B. Under these circumstances, and assuming further, for simplicity of illustration, that the two countries trade exclusively with one another, it is evident that the trade can not be carried on permanently upon the terms of an exchange of a commodity on the side of country A against gold on that of country B; for the continued transference of gold from the latter to the former country would sooner or later act upon prices in the two places, lowering them in B and raising them in A; and then one of two things would happen: either the commodity which formed the subject of the trade would rise in price in country A till it became no longer profitable to export it, and then the trade would come to an end; or before this occurred, the price of some commodity in country B would be brought below the level of its price in country A; and this commodity would become then for B the means of paying for its import. There would thus be established a difference in the comparative prices of the exchanged commodities in the two countries; and prices within the limits of each country being governed by cost of production, this would imply a corresponding difference in their comparative costs. Under all circumstances, therefore, it would be concluded, notwithstanding that prices are the immediate consideration, and notwithstanding that each commercial transaction, so to speak, stands upon its own merits, the fundamental consideration underlying the whole, supplying the motives and determining the result, is the comparative cost of producing commodities." (*Leading Principles*, III., ii., 1.)

possessions of others, and at the same time recognizes the necessity of maintaining its superiority in productive capacity. In this particular, therefore, the pursuit of the foreign demand offers great advantages.

If an objection is made to our abstract of the above it will probably be directed against our presentation of the portion which relates to the influences which cause the country originally the dearer to become the cheaper in production, and *vice versa*. It may be said, and this with truth, that it conveys a very different impression from that derived from the original. To the objector we should reply that the language of the condensed reproduction of the argument is intended to be not so much an accurate representation of the wording of the original as a clearer and more business-like formulation of the case, purposely substituted for what appears to be a succession of vague expressions chosen—consciously or unconsciously—to veil the harshness of the real programme. It is confidently claimed that from this point of view the abstract is more accurate—nearer to the essential truth of the matter—than the original. The burden lies upon the objector to suggest a better formulation of what the classic expositor must, under all the circumstances, be assumed to have had in mind, under the presumption that his argument has any pith, significance, or substance in it. It is, presumably, incontestable that what he sets out to show in the passages under discussion, is the manner in which the working of natural law brings it about that the importing must inevitably become the exporting country, and that his explanation is based upon the changes wrought in prices by the commercial transactions predicated in the case. The matter would seem to admit of no other interpretation than this. If this be the true view, the question of accuracy as regards the abstract takes this form:—Which is the more truthful representation of the succession of causes and effects through which the ultimate equilibrium between exports and imports is, according to the theory here expounded, to realize the final adjustment in a barter of goods for goods? Assuming the substantial correctness of our version of the Ricardian interpretation of the barter-proposition and his

As compared with the ruthless vigor of the aspirant to the trade of the world, the milder spirit presiding over the effort to develop the domestic consuming-power makes a poor figure as a motor-force of progress.

defense thereof, certain comments on both suggest themselves as follows :

1. Let us begin by making what may be called a Quantitive Analysis of the Ricardian programme. It will be observed that his argument, all through, deals wholly with purely-metaphysical quantities. The movements contemplated—even for the equilibration of the most trifling amounts—are upon a scale of stupendous magnitude. In order that the importation of some commodity never dealt in save in inconsiderable amounts, shall be paid for in commodities, a country preponderant in productive power is to be reduced to a condition of dependence for its supplies of manufactured goods on another country originally dependent in the same manner on *it*. How far must the reversal be carried in respect of converting the original exporting into the importing country and *vice versa*, before the balance hangs evenly suspended, and how much farther before the reversal is accomplished? Manifestly, it must reach a very considerable part of the manufactured goods consumed in the country in question, in order that the necessary depression shall be produced therein. Again, where is the line to be drawn between an amount of importation too small to cause any such impression upon prices as is requisite for the operation of the reversing-principle on any scale whatever? Which in turn suggests the question: Is there supposed to be any such relation of cause and effect between the importation of a given body or class of commodities and another such, so that one instance of importation will *cause* other similar instances as by a sort of contagion of example, as it were; or does the effect of one case of importation go no farther than to indicate that the same influences which operated to produce that case must, under like conditions, produce other similar effects? It is plain that we are wading into deeper and deeper water. Let us get somewhere where it is not over head. Luckily, there is one chance of getting something

C.—DEVELOPMENT OF ANTAGONISMS OF INTERESTS.

In this instance, the comparison between the two systems gives results favorable to that of developing the home Demand.

solid under foot :—an actual case from real life, bearing on this subject. Let us take advantage of it.

Some ten years ago, an incident occurred which afforded the classic Political Economy an opportunity for a practical exemplification of its position on this barter-question, with a result which should be of great benefit to bewildered inquirers as to what that position is. The President of one of the British technical institutes took occasion, in his annual address, to protest against the injustice of handicapping the British manufacturers of steel beams and girders in the race with their Belgian competitors, by taxing the home industry, right and left, from the raw materials still in their native mineral beds, to the last item of tool and appliance, while the foreigners laid down their products in London without paying one penny of taxation in any shape. The affair created quite a stir. Was Free Trade to be thus set up on in the house of its most express beneficiaries? Had the day come when British manufacturers, the class of all classes the most dependent on the preservation of the faith in British economic science, could stand up and openly proclaim their desire for the abandonment of the entire principle of untrammelled international exchange—for that was what the revolt pointed to? The *Times* stepped into the arena, and in a long and elaborate leader, evidently the work of a master hand, expounded the principles of the classic Political Economy applicable to the case. We can, of course, undertake no more than to indicate the broad outlines of the argument, which ran, substantially thus :

While there unquestionably is a hardship to the British steel manufacturers in the existing condition of things in respect of this branch of the trade, yet they must reconcile themselves to it, and, with their accustomed pluck and energy, find a way out of the difficulty; for, from the point of view of systematic Political Economy, the legislation they ask would be a thoroughly

As regards the internal affairs of the aggressive nation, it is plain that the lower the figure to which wages and the supplies of the wage-workers can be reduced, the firmer the hold of the nation on the foreign

unscientific, and hence altogether mistaken, movement. The right interpretation of the facts in this case is as follows:—The importation of these certain pounds sterling's worth of Belgian beams and girders signifies the exportation of a like amount, in payment therefor, of some product of British industry more advantageous to British interests, broadly considered, than would have been the production of the architectural steel.

Let us now inquire how far this incident can assist us in finding answers to our quantitative questions. In this case the importation had not reached large dimensions—probably not to exceed a few tens of thousands of pounds sterling—at the time when it was authoritatively pronounced to be sufficient to completely put into action the forces which would insure an exchange of products of British industry for the Belgian steel. But how could this be? It would be simply preposterous to maintain that this transaction, or group of transactions, could, of itself, produce any but the most microscopic effect in the direction contemplated by the hypothesis; and equally so to suppose that the infection of the example—or any other process—could cause the purchase of the Belgian goods to induce the purchase of the great quantity of other Belgian goods—far more than the entire output of the Belgian manufacturing industry—requisite for bringing about the necessary financial situation. But we must abandon the further prosecution of this line of search, which appears to be merely leading us into a constantly deepening fog. Let us try in another direction, but still on a quantitative basis.

It is manifest that there will arise cases in which the smooth working of the depleting-process will be disturbed. In fact, this may happen in a variety of ways. For example, the Belgian architectural steel imports into Great Britain may operate precisely as the hypothesis requires, and all be right, so far: but, on the other hand, suppose that meanwhile these Belgian steel

trade, and the larger the gains realized therefrom. Thus every movement for the improvement of Labor is weakened by the fear of handicapping the nation in the struggle for that "Supremacy" of which Mr. Jeans

manufacturers find it their interest—as they frequently do—to import British pig-iron from which to make these beams and girders and other objects of steel: and this to a larger extent than the trade with Great Britain in Belgian manufactured steel of all kinds. In such a case we should find thwarted the whole beneficent process by which the barter of British products for the Belgian steel was to have been brought about. What can be done toward depleting Great Britain by an importation from Belgium, when this pestilent trade in British pig-iron upsets all calculations by enhancing British prosperity to a greater extent than the steel-importing can carry her forward toward the condition in which her labor will underbid Belgian labor, and so secure the Belgian demand? Or the same disappointing result may be realized in case some other country should suddenly take a fancy to buy British goods; a case which, as we learn from Mr. Jeans and others, has already been occurring to a considerable extent:—for we must bear in mind that the case of two modern industrial nations trading exclusively with each other was but a provisional assumption temporarily accepted as a logical device, but to be dropped when its purpose had been accomplished. But whatever may be the particular way in which the distributing cause may be introduced, it is plain that it is not a violent presumption that there will be cases in which a certain commodity will be imported, and hence the correlated home industry atrophied, yet will the exports of the nation more than counterbalance the tendency to the breakdown in values which, according to the Ricardian theory, the importing would, if undisturbed, have ultimately secured. The question therefore is legitimate, What is to be done when the barter-principle is thus balked of its natural function? Shall the importation be allowed to go on under such circumstances, when it entails no other consequences than the depletion described in the Ricardian barter-theory as occur-

treats (page 300, *supra*), and the public becomes the natural ally of Capital in its efforts toward the hardening of the conditions upon which it will give employment to Labor. On the contrary, when the policy of

ring to country B through the continued export of gold to pay for the continually-imported commodities? No possibility of a sale of home products being created by the purchase of the foreign products, why should a system be tolerated which produces depletion to a degree corresponding with the extent of the importation, yet never depletes enough to do any good—in other words, when the consequences entailed embrace all of the objectionable features and none of the beneficent ones?

Another quantitative question, and one of vital importance from a business point of view, is that of Time. But, weighty as it is, it does not appear to have engaged the attention of the classic political economists. A slight examination makes it evident that in no other phase of the barter-programme do we have more nebulous materials to deal with. How long will it take a country to realize the results of the working of the barter-principle to the extent necessary to bring about an equilibration of the goods imported by the exportation of an equivalent amount? The single item of the adjustment of prices to a change in the money-supply would, according to Cairnes, leave little for a living generation to expect. Speaking of the effect produced on wages and prices by an increased supply of money and its consequent depreciation, he says that it may take perhaps half a century to accomplish the readjustment (*Leading Principles*, II., ii., 9). But it is evident that we are to reap little from this field. The positive is not to be reached through dealing with data so metaphysical. Evidently, the Ricardian barter-hypothesis is out of place in the realm of the concrete, or else the treatment of the subject is beyond our mental grasp. In either case we can do no better than to drop this line of investigation.

2. We pass therefore to the second and equally-obvious business question of the financial aspects of Ricardo's programme. The subject is a large one, but it calls for but little

the nation is shaped with the aim of building up Demand among the masses of its own population, the public interest and that of Labor (within that country) are in perfect harmony, and the relations between Capital

elaboration. We shall consider but one phase of it. Fancy the commotion that would have arisen had *The Times's* defender of the classic Political Economy proceeded to explain the process by which the demand from Belgium was to be secured. Imagine the sensation had he gone on to describe how it would require a universal cataclysm in values throughout the United Kingdom—for a local or partial depression could neither maintain a prolonged existence, nor be effective for the contemplated work if it did—to render Great Britain so much cheaper a country than Belgium, in which to manufacture, that Belgian traders would look to her for supplies on the scale demanded by the hypothesis. It seems unnecessary to pursue the topic any further.

Aside from these suggestions of the business sense respecting the practical working of the Ricardian programme, there are other objections thereto which relate more especially to errors in the reasoning. The following seem too important to be ignored; but they will have to be treated churlishly in respect of the space accorded them.

3. Observe in the above citation from Cairnes (p. 356) the passage beginning thus:—"The commodity being sold, its value must be transmitted," etc., and ending thus:—"But country B might pay for its imports, not by the export of a commodity," etc. Here we find Adam Smith's theory of the Direct Barter treated as a universally-recognized reality.

4. Another conspicuous feature of the argument is the assumption of a rise in the purchasing power of money taking place in one of two intertrading countries, coincidently with a fall therein, in the other. We have recently observed (see p. 337, *supra*) how completely the classic authorities have established the impossibility of any such occurrence.

5. But perhaps the most remarkable among these logical lapses is the following:—It is to be remarked that the entire

and Labor, always necessarily under the strain due to their opposing interests on the question of wages, are mollified by a common consciousness and recognition of a community of interest in respect of other matters.

body of the classic doctrine on the subject of international exchange is comprised in the proposition that it is a barter of goods for goods: this position being wielded as a bludgeon wherewith to give a quietus, once for all, to the "mercantile absurdity that the practice of importing commodities and exporting gold in payment of them is a depressing one to the importing, and enriching one to the exporting, country." When it was objected that people do not exchange goods for goods, the classic answer was, "But that is not what we say happens. If you understood the simplest elements of Political Economy, you would know that what does happen, when the entire transaction is taken into account, is this, namely, that domestic goods must necessarily, according to the inevitable working of natural law, be exported to pay for them." Yet we find this absurdity exalted to the position of the head of the corner in the argument which is to save the barter-doctrine from the disestablishment threatened it on its failure to show a reason for it in the propensities of human nature. It is much to be doubted whether the literature of scientific research can afford another such example of an argument intended to overthrow a certain asserted principle, being openly, deliberately, and expressly, based on that identical principle to an extent that makes the whole argument stand or fall with it.

Now can this really be true? Is there not some mistake somewhere? We can not rid ourselves of the impression that we have overlooked something vital, and that the error lies with us and not with the author. The more we ponder the matter, the more incredible does it seem that we are in the right here. In the first place, consider the magnitude of the issue involved. What would the classic Political Economy amount to, as a science of concrete existence, without its great positive precept of Free Trade? And what would be left of free trade if the barter theory were disestablished? Again, consider the eminence of the author of this argument and of

As to the external relations of the aggressive nation, we have now learned enough respecting the cheapness of home production and the wisdom of a policy directed to the development of a nation's own productive

the authorities who have acclaimed it in terms so enthusiastic. "Previous to this," says Mill, "the theory of foreign trade was an unintelligible chaos." Says Cairnes, "One of the most important discoveries in Political Economy that has been made since the time of Adam Smith is the theory of foreign trade established by Ricardo." And again, referring to the argument quoted above, "Such is the theory of international trade as it was left by Ricardo. . . . It can not be doubted that it sounds the depths of the problem, and embraces in its scope all the most important—certainly all the most conspicuous—facts in the sphere of international dealings." Let us try again.

In the first place, then, let us make sure of a correct understanding of the proposition to be demonstrated. We surely can not be in error in formulating it thus:—"A country does not lose if a given industry is prevented from coming into existence within its boundaries, or is extinguished after being artificially introduced, because the importation of the product of that industry necessarily involves the production at home of the things which must be paid for it." There would seem to be nothing included in this statement of the doctrine that does not belong to the classic position on the subject, and nothing essential omitted that is included therein. For example, this rendering of the principle seems to run on all fours with Adam Smith's "better buy the foreign commodity with some part of the product of our own industry," etc.; with Mill's statement that foreign commerce enables a country "to obtain things . . . which it must have produced at a greater expense of capital and labor than the cost of the things which it exports to pay for them"; and Cairnes's explanation that the cost to England of the wheat she imports "would be represented by the cost of the commodities which we export to pay for them." There is nothing in any of the above, nor in any of the multi-

power to understand that the interests of the foreign-demand-seeking nation and those of the nation whose Demand it strives to secure must, as a rule, be in direct antagonism. The temptations to employ unjustifiable

tude of citations of similar import that might be made from the writings of these and the rest of the classic authorities, about an interval of a generation or so, or of any other period, long or short, between the importing and the exporting, between the purchase of the foreign commodity and the "payment" for it. There is no hint of results arrived at through consequences entailed by the importation. The consequences entailed by the importation of the foreign commodity are the payment for it in home-made commodities, so far as anything in the language employed would indicate; and hence the perfectly-legitimate inference that the exporting is done when the foreign commodity is paid for, to wit., settlement "on the nail" or on customary commercial credit. It seems incontestible, therefore, that this is, in substance, the *quod est demonstrandum*. So much for the proposition. Next in order for consideration is the demonstration itself.

But we have scarcely taken a preliminary glance at the latter, when we perceive that it is not directed to this object, but to one differing essentially therefrom. There is no need of going into particulars here. They are already at our fingers' ends. The point is plain, obvious, unquestionable. Be the demonstration itself logical or the contrary, sound or unsound, conclusive or otherwise, it has no pertinence to the principle which underlies the entire practical, positive, side of the classic theory of international exchange, which we now plainly perceive to be, not the Ricardian, ultimate-result, barter-theory of international trade, but the Adam-Smithian theory of an actual, not a metaphysical, barter: a real "payment" of the debt contracted for the foreign commodity with commodities the fruit of the home industry. Thus the Smithian theory is once more left without any support from a reference to the recognized propensities of men in trading: the reasoning ostensibly devoted to the establishing of the classic theory of

methods for accomplishing the ends sought, must sometimes be greater than the power of the propagandist of trade to resist. No such reasons for a crusade against other industries than its own can move the

the actual process of international trading being in fact wholly taken up with the vindication of a specially-devised theory of Ricardo's, which is put forward by him as the one which the classic Political Economy employs, but which, in verity, is only brought out on dress-parade, as it were, when the classic system is challenged to establish its barter-doctrine by connecting it with the established principles of human motive.

Truly this thing is becoming monotonous. Here we have been, diligently employed in the effort to discover some escape from the conclusion that the classic system employs as the basis of its argument, the identical principle against which that argument is directed, and the first thing we know we suddenly discover what most assuredly seem to be proofs that it confuses the facts as to which of its two barter theories it actually employs: setting forth and undertaking to establish the Ricardian, ultimate-barter theory, to the total ignoring of the one—the Smithian—which it employs exclusively in practice. If these seeming proofs endure the verification-test, we shall have the singular condition of things—singular in the case of a systematic science—that it is, practically, a matter of indifference whether the argument is valid or not, seeing that at best it can amount to nothing more than the triumphant defence of a position which the classic system does not occupy: the fact of the matter being that while this science supposes itself to apply in practice that one of the two barter theories which it defends in this argument, it uniformly applies the one which at the opening of that argument it in express terms repudiates. Yet the appeal to the testimony of the facts sets the seal of verification on the incriminating analysis. But let us get back to the direct line of our inquiry.

The imputation upon the Ricardian argument is this, that it employs as an indispensable datum, the very proposition which it is the purpose of the argument to disprove. What,

nation intent upon raising the earnings of its labor to the highest possible figure. In originally adopting the home-demand system, it resigned, once for all, all expectation of successful competition with foreign industries on their own ground.

then, is that proposition? Cairnes, as we have seen, puts it thus:—"It is evident that the trade can not be carried on permanently upon the terms of an exchange of a commodity on the side of country A against gold on that of country B; for the continued transference of gold from the latter to the former country would sooner or later act upon prices in the two places, lowering them in B and raising them in A." Now let us set forth the facts in order.

The business view of the matter, as presented above in the text, is as follows:—When M in the United States buys \$1,000 worth of goods from N in England, the immediate consequences are (1) that the United States obtains cloth to that value and parts with a like sum in money, and (2) that England's resources in woollen goods are diminished to the extent of \$1,000 worth, and her money-resources enlarged to that amount. The ultimate consequences—ultimate in the sense that this is as far as our observations can be extended with trustworthy results—are (1) that the United States have either gained or lost, according as the cloth or the money proves to be the more serviceable, and (2) England has realized a gain, the amount of which can be estimated by a comparison of the value of the raw materials with that obtained for the finished goods. (See page 300, *supra*.)

Against this the classic Political Economy sets up the reply presented above (at page 352). In substantiation of the position therein defined—which is the Smithian one—it begins by substituting the Ricardian, and then proceeds to establish the connection between the movement therein described and the known propensities of human nature, by showing what must happen after the protracted goods-purchasing has entailed the consequences which the business view assigns to that proceeding. There would seem to be no doubt or obscurity here. The depletion and depression of the country which practices

D.—ULTIMATE CONSEQUENCES OF THE TWO SYSTEMS,
RESPECTIVELY.

The foreign-demand system is essentially unscientific in this, that its operation necessarily develops

the policy of importing goods and exporting money to pay for them is an indispensable datum of the classic argument against—what? Against the business principle that the country which practices the policy of importing goods and exporting money to pay for them must suffer depletion and depression as a consequence thereof.

The results of our second inquiry do not seem to weaken the force of the indications derived from our first. The imputation must stand unless—or until—something overlooked in our analysis of the case can be pointed out. This contingency aside, the classic Political Economy stands convicted of employing the reverse of its conclusion as a premiss of the reasoning by which that same conclusion is reached:—of using a proposition (to wit, that international trade is made up of simple money-transactions) in its positive form, as the basis of its proof that the proposition is true in its opposite, negative, form.

Before dropping this line of inquiry, let us gain a clearer comprehension of the historical aspects of these opposing barter-theories—the story of their introduction into the body of the classic system and the offices they have performed: that is to say, the service to which each has severally been put. We shall endeavor to make the necessary repetition as little irksome as is consistent with coherence in the narrative.

Adam Smith introduced the Smithian or Immediate Barter theory as a simple matter of course. He made no attempt to establish it as a doctrine by referring it, according to the accustomed method, to an indisputable principle of human nature. Although in fact a mere assumption, it seems never to have occurred to him to do in this case what he recognized as a scientific necessity in other cases, namely, to show that, under the conditions predicated, the normal working of human propensity would impel men to act as the assumption requires.

forces ultimately adequate to its destruction. The constant effort to keep in the van of productive power must sooner or later bring about the establishment in other countries of rival enterprises upon the latest and

From the date of the publication of *The Wealth of Nations* to the present day, this assumption has been the principle employed as the man-of-all-work for the defence of Free Trade. What matter about the *pros* and *contras* of such questions as comparative cost of production, the development of national productive power, and the like, if the production is to go on at home all the more because of importation from abroad: not only so, but if the larger volume of productive enterprise is to be directed exclusively upon the industries in which the nation enjoys special advantages? And the goods-for-goods doctrine made it so. But what function does this leave for the Ricardian Ultimate-Barter theory? A very important one, indeed, when we come observingly to take in all the facts. This is not a difficult undertaking. When once the truth is pointed out, it lies in plain sight. The trouble about the Smithian theory is, that though admirably adapted to the use it is put to, as above described, it goes all to pieces when challenged. If one were to ask, "Where is the warrant for asserting that goods are exchanged for goods? Goods are exchanged for money. You have no color of justification for your position unless you can show that the ordinary motives of men in trading make it certain that they will trade by barter instead of by sale and purchase." If one were to ask this, there would be nothing for it, for the classic champion, than to collapse. Ricardo, as we have described above, recognizing the desperate plight of the immediate-barter theory, devised the ultimate-barter doctrine, made to order, as it were, so as to describe a movement which must take place under the ordinary working of human motive. In this he was completely successful. Given the conditions predicated, and the human action will be precisely what the theory requires. The curiosity of the matter lies in the Something Overlooked by Ricardo and the expounders of the classic system ever since; namely, that this

most improved methods. So many circumstances conspire, other things being equal, to give the advantage to the home over the foreign industry—one of these, a constant fact or menace, to wit., protective legislation

doctrine is not now, never has been, and never can be, the one which the classic system employs as a principle in its reasoning on practical problems such as that of the regulation of international trade. For that purpose it is as useless as would be a new theory of Greek musical notation. Granted its premisses, its conclusion is incontestible : but what could be made out of advice respecting the management of a nation's business affairs, based on a programme which does not, and cannot be made to, define things any less vaguely than our quantitative analysis of the Ricardian barter-theory has shown that programme to be capable of doing ? But what it does do, is this: When the authority of the Smithian theory is challenged, the Ricardian theory is substituted for it. The trial proceeds, the necessary premisses are conceded, the authority of "the classic theory" is triumphantly established, and the Smithian theory, thus vindicated, resumes business ; the Ricardian meantime retiring out of notice until another similar emergency arises. The circumstance is overlooked that the theory that is verified is not put to use, and the theory that is put to use is not verified. The immediate-barter doctrine travels and does business under the passport issued to the principle of ultimate barter. Or, slightly changing the simile, it is as though the two barter-theories constituted a business firm for the practice of medicine : the Immediate member attending to the practice and prescribing the remedies for diseased economic legislation, under the sanction of the Ultimate member's diploma. The former never passed an examination, and the latter's constitution is far too feeble for him to take an active part in the business, but, by a fine adaptation of Adam Smith's favorite principle of the Division of Labor, the requirements for a licensed practitioner and the active operations connected with his profession are happily combined in the dual unity which the associated capacities present. Or, in further eluci-

—that the time must come when some important industry will attain in its new home a position of decided superiority in competing-power over that industry in the country of its original development. Then

dation of the point, we may still further vary the illustration, recalling the arrangement—said to be not uncommon in those States of the Union in which criticism of newspaper literature is apt to take the form of a personal encounter—whereby two separate personalities jointly represent “the editor”: one of them answering the calls of ordinary business, the other the demands for explanations. The Smithian theory fulfils the requirements of the business routine, while the Ricardian represents the “fighting editor” when a challenge must be answered. In the case of the discussion over the importation of the Belgian steel into England, we have seen that it is the Smithian theory that is brought forward to reconcile the British manufacturers to the loss of that branch of their trade: but can there be the slightest doubt as to what the response would have been had the validity of the premiss, the actual exchange of goods for goods, been challenged? The able economist who prepared the *Times* leader would have opened his reply as Ricardo opens the original discussion, by conceding that the immediate-barter theory is indefensible, and would then have proceeded, with Ricardo, to define *The Times's* position as that of the ultimate theory, and then refer to it as a commonplace of all well-informed people, everywhere. If there is any disposition in the mind of the reader to question this, let him ask himself the question what else could have happened.

As Adam Smith supplied to the classic system the theory of immediate, and Ricardo that of ultimate, barter, so did Mill contribute the third leading principle connected with its Theory of International Exchange, to wit., the Equation of International Demand. The line of reasoning by which Mill was led up to this conception is not hard to trace out. We have seen (see page 329, *supra*) that he had succeeded in convincing himself that the function of money as a medium of exchange was, in essence, an insignificant one. According to his view of logical

there ensues, in respect of that industry, utter helplessness on the part of the latter nation. It is so vital to its entire industrial and commercial system that the principle of *laissez faire* should rule the policy of the

procedure, the true method of reaching broad and comprehensive views was to make abstraction of all non-essential phenomena and reason of the case in hand, as though those minor elements had no existence. What more obvious, then, than that this non-essential, simply adventitious, instrumentality of money should be dropped out of sight, and the subject of international trade reasoned of as though it was in reality carried on as it would be in the absence of this feature? From the point of view thus reached, Mill's position is unassailable. Make abstraction of the money-feature, and a nation must produce in order that it may import. Trade necessarily involves a *quid* in hand to be offered *pro* the *quo* desired. Hence the Equation of International Demand.

But observe the unfortunate results of the neglect on the part of Mill to apply the verification-test in this case: see what it would have revealed to him. For one thing, he would have perceived that he was putting each modern industrial nation in the position of an individual without money in his pocket and, by reason of certain unchangeable conditions, debarred from a resort to mendicancy. Such an one must of course produce in order that he may trade: exchange, with him, necessarily involves production. But observation of the actual facts must have speedily convinced Mill that each of the modern inter-trading nations is in the position of an individual having money in his pocket. M could not buy the cloth of N but for the fact that he has—or is assumed to have—the money to settle the bill for it, at maturity. Now, suppose the individual—any individual—having money in hand, chooses to buy something, and does so:—what are the economic results of the transaction? His stock of money is depleted by so much. Does that involve anything further,—entail any consequences? Yes, these:—If the expenditure exhausts his stock of money, production becomes to him an indispensable prerequisite of

other nations, that any suggestion of taking measures of defence against the superior productive capacity of another nation, even if it went no further than to be worsted in its councils, would be as suicidal as the ac-

further trading. If he has still a stock of money left, and while this condition of things endures, he can go on trading and reducing his resources. It is impossible to imagine any force developed out of his continued exchanging of money for goods that will necessarily involve his going to work to produce goods to employ in his trading as a substitute for money. One of the functions of money, Mill would have perceived, is the embodiment of wealth in a form which expressly provides the conditions under which trading can go on without the necessity of production of any kind. What is true here of the individual man, he would have recognized as true also of the individual nation. It always has money in pocket, so that when it exchanges money for goods, it yet remains in a condition to go on doing so. Such a comparison of the facts of real life with his theory of the equation of international demand must have convinced Mill that the latter was as clearly a baseless metaphysical fiction as his trading world, in which things would have gone on just as they have done, though a medium of exchange had never been thought of.

We need not occupy our space with more than a simple reference to the fallacy embodied in Ricardo's version of the Mercantile theory of the manner in which the exchange of gold for goods brings about the collapse of values, as given in his defence of his ultimate barter theory. It seems incontestible that the mercantile explanation must be rejected in favor of the hypothesis expounded in the text (page 346, *supra*), namely, that the collapse is due to the arrest of the diffusion of money among those bound to spend it quickly:—an arrest due to the transfer of Demand from the home to the foreign industry.

Nor need we devote many words in this place to the contradiction of the classic doctrine of the determination of the purchasing-power of money in the general market of the inter-trading nations, involved in Ricardo's premiss that a general

tion of the besieged in a mediaeval stronghold letting down to the besiegers without, a basket of dynamite with directions for its use. The suffering nation must endure in silence the sight of the gradual crippling or

decline in the value of gold can take place in one country, simultaneously with a general advance therein, in another intertrading country. A reference to pages 143-144, *supra*, and the reading, in immediate succession, of the matter to be found there and that on pages 337-339, *supra*, will sufficiently cover the whole case.

All this time, our attention has been so completely absorbed by other matters that we have had none left for what has heretofore usually been our leading point of inquiry, to wit, the verification-test. But our investigations directed elsewhere have left little to be looked after concerning the direct question, and the matter can be disposed of in a few lines.

How fares it with Adam Smith's immediate-barter assumption? Can a single instance of its actual operation in real life be recalled? Not one: most assuredly, not one. And how with Ricardo's ultimate-barter hypothesis? In the whole history of international trade, past or present, can a single case be pointed out, in which a nation has experienced, or is now in process of experiencing, the reversal of its relations with some other nation, or with the rest of the nations, according to the succession of causes and effects set forth in that hypothesis? Again the answer must be, not one. A great empire has indeed, as we shall learn presently (p. 389, *infra*), made a systematic trial of it and progressed as far as the complete verification of that feature of the theory which premises the value-cataclysm as the result of—exchanging gold for goods, according to Ricardo—of diverting Demand from the home to the foreign industries according to the business view of the question. But there the movement stopped, without having developed the slightest promise of the revival of industry in the depleted nation, nor of diminution of industrial activity and a prosperity advancing by "leaps and bounds" in the nation chiefly representing the rôle of the goods-exporting, gold-

final death of each overmatched industry, and, after the manner of the Siberian mother beset by wolves, cast one after another of the cherished offspring of her economic policy to the pursuing pack, on the doubtful chance of thereby saving the rest.

Another practical problem, arising from this necessity of maintaining a consistent position respecting the freedom of contract in its application to international dealings, must, sooner or later, confront the statesman who bases the national prosperity on the foreign demand. The influx of labor from countries of lower wages must be endured in silence, no matter how great the discontent, how desperate the condition, of the home working-men with whom the newcomers compete. In fact, this fresh supply of labor chimes in so well with the supposed interests, both of the employing class and of the nation at large, that the dis-

importing party to the trading. It is, in fact, inconceivable that a nation should reach the condition required for the working of the Ricardian hypothesis:—a condition in which the preponderance of plethora or of exhaustion should be so complete as that theory demands, even leaving out of the case the impossibility of the contrast in the purchasing-power of money which it involves. The assumption that such a succession of causes and effects is a possibility—not to speak of conceiving it to be the familiar experience—in real life, is simply indefensible.

Viewed in every possible aspect, the classic treatment of the subject of Intermediate Exchange leaves upon the mind of the business investigator the picture of a body of brilliant speculative philosophers wrestling fruitlessly with a phenomenon essentially of the simplest, but handled by them in a way to involve themselves in an inextricable tangle of complications purely of their own creation.

position to resist it may be lacking in those quarters which exercise the most influence over the public policy.

As has already been abundantly shown, the treatment of the immigration-problem presents no difficulty to the nation which seeks demand through the development of the purchasing-power of its own labor-class.

Such are the deductions which we make from the data at our command. It remains to submit them to the test of a comparison with the facts of concrete experience. Fortunately, there is no lack of materials for our purpose. For, notwithstanding the confidence with which the classic Political Economy asserts the untrustworthiness of experiment in economic legislation*, we shall find that, aside from numerous minor instances of effects unmistakably traceable to that cause, two great examples of deliberate governmental action on the part of two of the Great European Powers stand forth conspicuous as the pyramids in the desert, furnishing the data for conclusions too obviously correct to be rationally contested.

The powers in question were England and Russia. The first of these undertook to secure a demand for its products in the outside world through a steadily-maintained supremacy in productive capacity. The second attempted to obtain the same desideratum simply through the untrammeled, undisturbed, working of natural law, which, it was expected, would cause all that the Russian people purchased of foreign products

* See Cairnes's elaborate exposition of Mill's position on this question, "Logical Method," Lecture III., § 4.

to be paid for in domestic products, without reference to the question of inferiority or superiority in productive power as between the intertrading nations. Manifestly, the difference in the conditions under which the respective experiments were conducted, compels us to discuss them in severalty. We therefore proceed to take them up in order.

(1.)—*The English Experiment.* The opening of the fourteenth century found England a small, poor, and well-nigh stagnant nation. The close of the fifteenth left everything transformed as by magic. The towns were all stir, growth, and progress. The population, other than the agricultural, had vastly improved in their ideas of comfort and in the command of means. Whence the change? In the xivth century, England had been an exporter of wool; in the xvth, she became an exporter of woollens*. Those were the days of small things in respect of the volume of transactions; but they were big with the fate of mankind. The movement was wholly empirical. Men followed certain pursuits because they found them gainful. Without knowing it, nor caring to know it, they were practicing the principle in which Mr. Jeans finds the explanation of the marvellous wealth of England to-day.

It was like the taste of blood to the tame tiger. The nation roused itself to the possibilities of the situation. The supremacy in trade which was yielding such golden returns must be maintained against the world. The individual adventured, the nation backed him up. Wealth beyond the dreams of avarice

* These statements are, of course, rough approximations.

flowed in from the vast and teeming regions in which a Roman peace and Manchester cottons were conferred alike upon savage islanders and ancient civilizations. But this magnificent success had its drawbacks. The fierce rapacity that spurred the nation onward to its great achievements in the development of its productive power, blinded it to the frightful ills inflicted upon helpless and unoffending multitudes; not so much—though that was bad enough—in the cruel wars which it was forced to wage, as in the consequences of the sudden substitution, among the teeming populations of the East, of foreign factory-products for those of native hand-labor. Added to these were the results of the measures taken for the maintenance of the hold obtained over vainly-protesting customers.—opium for China, alcoholic drink for the people of India—thus rearing in the pitiless pursuit of trade, a trophy compared with which Tamerlane's pyramid of a mere one hundred thousand human skulls dwindles into insignificance.

While these things occurred abroad, antagonisms in interest were likewise developed at home. Cheap wages were inconsistent with dear food. The agricultural interest must yield to the demands of England's Supremacy. The pressure in this direction became irresistible in the course of the first half of the present century, and the protective legislation in favor of home agriculture was abolished;—with what results as regards the national wealth in real estate need not be dwelt upon here.

But the most portentous omen that has yet appeared is one of comparatively recent date. The seeds of the dissolution of the foreign-demand system described

above have begun to germinate, and have even already borne fruit where the circumstances have been specially favorable to such development. England has now, to all practical intents and purposes, surrendered the silk-manufacture to France, Italy, and the East; Macclesfield and Coventry pine that Manchester, Leeds and Middlesboro' may flourish. In the great industrial field of iron metallurgy—a field once so conspicuously her own—England to-day has forced upon her attention facts which forbid all hope, for all future time, of anything beyond meagre returns for Capital and unsatisfactory remuneration of Labor, because of competition "in all the great staples of that industry, not from European rivals alone, but also—under certain conditions to be described presently—from across the Atlantic. We have already had our attention drawn (see page 360 *supra*) to the case of the Belgian structural steel.

As regards the general trade of the world, we need go no further than Mr. Jeans's work for data sufficient to produce very positive convictions* respecting the ex-

* For example, the following:

"The truth is that Germany [in 1885] does a larger export trade than England with most European countries—with Russia, Norway, Denmark, Sweden, Holland, and Belgium. France carries on a greater export trade than we do with Belgium, Italy, and Spain; and a very notable feature of the case is, that while these countries have been making headway, we have been losing ground. In 1872 our exports to Holland were nearly double those of Prussia; in 1882 Prussia's exports were considerably above those of England. In the former year, England's exports to Italy were about £1,500,000 less than those of France; in 1882 England's exports had not sensibly

tent to which the undermining forces have already disturbed the working of the English foreign policy; but there is one feature of the existing status of the steel-manufacture that is too full of significance to be altogether ignored.

In the "American Manufacturer" (a technical weekly newspaper of high authority) of January 4th, 1895 occur the following quotations:—Bessemer Pig Iron at Pittsburg, \$10.00 per ton (£2. os. od.); in London on January 3rd, £2. 3s. od. per ton (\$10.75). Steel Billets (the great staple of the steel trade) at Pittsburg, \$15.00 per ton (£3. os. od.); in London, January 3rd, 1895, £3. 15s. od. (\$18.75).

Such is the condition of things with the American

increased, while those of France had augmented to the volume of nearly £3,500,000. . . . In 1872 France imported from Germany commodities of the value of 54 per cent. of her imports from England; in 1882 the imports from Germany were 65 per cent. of those from our own country. Coming finally to the United States, we find that whereas 40 per cent. of the total importation into that country in 1872 were from this country, the percentage of the total importations received from England in 1882 was only about 26 per cent., Germany having in the meantime improved her export trade to the States to the extent of \$10,000,000, France to the amount of \$45,000,000, Belgium by about \$10,000,000, and Holland by about \$6,000,000, concurrently with a decline of \$53,000,000 in the value of the imports from the United Kingdom. . . . Between 1873 and 1882 there was an absolute decline in our exports to Chili, while those of Germany and Italy had increased. Our exports to China showed a very slight increase between 1872 and 1882, while those of the United States had increased about sevenfold, those of the Continent of Europe sixfold, and those of Japan had nearly doubled." *England's Supremacy*, Chap. VIII.

employer handicapped with an adverse ratio of 3 to 2 in the cost of labor. Suppose now that British statesmanship should have its way, and "freedom of contract" prevail permanently throughout the civilized world, where would England stand as regards this important industry;—one of the chief among those which account for her "unique wealth"? The permanency of the arrangement could have but one effect upon wages, namely, to cause them to approximate more and more to a common level in the two countries. As this movement developed, the advantages which enable America under present labor-conditions to produce steel at the same cost as England must eventually qualify her for supplying England herself and all her present customers with steel and steel-fabrics at prices hopelessly below the cost to the English manufacturer. Thus her salvation in this industry depends on the continuance, on the part of America, of a policy as regards foreign trade which shall keep up the standard of wages in that country: in otherwords, upon the persistance of the American Goverment in its refusal to do that which English policy would have it do. Truly an embarrassing position for British science and British statesmanship.

In further pursuance of the question of the auguries for the future, we turn now to the yet blacker cloud which is looming up on the Eastern horizon. Suppose that the China of to-day should catch the idea that awakened the England of five centuries ago, laying hold of the truth that national wealth is coined by the conversion of the useless into the useful; that her labor and her capital are bees that will store her combs with honey if they may but ply their vocations; that wealth

and power and independence are not for the nation that can buy cheap, but for the nation that can sell cheap. In such case, what hinders that Chinese cutlery shall supply Sheffield, Chinese cottons Manchester, and Chinese ships and ordnance supersede Portsmouth and Woolwich? Is the suggestion so very far-fetched? What resources in physical objects or mental faculties necessary for the work does the Chinese Empire lack? None. Nothing is wanting but the will to have it so. And how long will this lack endure with notice served on it respecting the intentions toward it of the European powers, such as England's in her opium wars, France's in Tonquin, and Russia in the Pamirs? All this might have been suggested any time within a number of years past, with reasonable probability of its realization within the lifetime of some already born; but what shall we say of the possibilities of the near future under the altered condition of things created by the recent war with Japan: the object lesson impressed on China's philosophy and statesmanship respecting the vital necessity of adopting Western ideas, and the new treaties under which it is no longer necessary to rely upon Chinese enterprise for the introduction of European industrial methods, but, on the contrary, the Empire is thrown open to the skill, experience, and capital of the West, to adventure *ad libitum* in those marvelously-tempting fields. The history of Japanese industrial and commercial development in the last ten years leaves nothing to conjecture respecting the Chinese movement, save the question of time.

Upon this question, even, there are two reasons, very convincing to the business mind, why it should

be regarded as being rapidly narrowed down to alarming limits. Observe the facts embodied in the note appended hereto*, and in digesting their

* The following figures are taken from *Primitive Civilizations*, by E. J. Simcox. Swan, Sonnenschein & Co. London, 1894.

“Chinese wages are low when stated in European currency, but, taken in connexion with the purchasing-power of coin in China, they do not compare unfavorably with the earnings usual in most European countries. Of course wages as well as rents vary in different parts of the country; but the following statements correspond fairly with the generalization of a Chinese writer, who puts the average earnings of a worker at a franc a day, half of which is enough to feed a family of five.

“Carpenters and masons earn 20 to 30 cents a day, or about one shilling, boarding themselves. The usual wages of farm servants are about £3 10s. per annum, with food. . . . There has been little or no change in the rate of wages in the last two centuries, for the penal code specifies 7d. a day as the amount which officials must pay to carriers or workmen, whom they have wrongfully pressed into their service for work required by them in their private capacity only.

“M. Biot estimated the cost to parents of a year's schooling at 15 francs in a town, and at 6 francs, or its equivalent in rice, in the country.”

The author quotes another European traveller as giving the following figures, obtained on the spot :

“A silk-weaving establishment employed about 100 men, who earned an average of 5d. per day and their food. Coal-miners in the same district, working in two shifts of 12 hours, received about 7d a day and food estimated at half as much more. Their wages are paid every 10 days, pay-day being a holiday, so that 10 days' pay is given for 9 days' work. They take a warm bath on coming off their shift, and the galleries are not allowed to be less than 8 feet high, for the sake of ventilation, nor to go so far underground as to incur the least danger of accidents to life or limb. The average wages of miners at a coal-field in Shantung is 9d. a day.

significance bear in mind the fact that they are the product of conditions prevailing throughout an inconceivably vast population, conservative beyond Western comprehension, so that any really significant change in these telling figures is a thing positively impossible within generations. Suppose the cotton manufacturers of Manchester waked up one morning to find these prices established in Salford, but Manchester as much wedded to present conditions—that is, with as little power of establishing the new status within *her* limits as now; what would they say of the prospect of preventing even their own employees from buying Salford cottons: that is, while they had money to buy anything with? Yet China is only a little way—a few shillings on the ton—further off than Salford.

“Hired tea-pickers are paid 5d. a day, but experts can earn 6d. to 9d. a day, piece-work; wages of laborers in the tea districts range from 2d. to 3d. a day with their food, which is almost always furnished by the farmers, and which may cost about 3d. or 4d. more, making the whole days’ labor amount to 6d. to 7d. Women and children earn about 3d. a day for picking the dead leaves from tea. Boatmen, like the cultivators in summer, eat five meals a day, and receive 5d. a day in addition. The boatmen of a salvage corps, a sort of Humane Society, on the Yang-tse-kiang, are paid 6d. a day, besides 8d. for every living body recovered, and 5d. to 6d. for each corpse. Junkmen in Sz’Chuen get 8d. a day and 5 cupfulls of cooked rice; and, though this class is reckoned among the lowest of the population, Mr. Little found them paying 5d. to hire a flower-boat to give them a concert. The pay of a horse and man is given at 9d. a day. In another district the men employed in an Imperial gun-foundry earn 6d. a day and their food: but at the salt-works, where, however, some perquisites in kind are probably enjoyed, only 2d. a day and food are allowed.”

The facts of the matter are simply these, and there is no escaping them: The prize of a profit which recalls the stories of the days when the British export trade made the wealth of the nation to increase by leaps and bounds is now held out to those who will simply transfer their capital and experience to the regions where the conditions indicated by those figures prevail. The offer is too tempting to fail of catching at least a specially adventurous few—mostly Japanese at first, perhaps—and when these have blazed the way, the trickling stream will swell into a deluge. Is it a supposable thing—is it within the limits of possibility—that there are not at this time, in this summer of this year of grace and of the China-Japanese war, 1895, men of brains and money accumulating with eager haste the information on which to proceed in this new war of conquest? Will the scanty remnant of the years of the nineteenth century have lapsed before the idols will be shattered in the temples of *laissez faire* and its high priests dragged from its altars to explain in the market-place why the purchase of Chinese cottons and woolens, metals and pottery, does not cause a correspondent rush of orders from China for British products?

Can human ingenuity suggest a policy for England that will enable her to maintain her time-honored attitude toward "Freedom of Contract," and at the same time preserve for her even her own markets?

Another example of the unsatisfactory working of the foreign-demand system is to be found in the history of the Imperial Federation scheme. This movement may be regarded as being in a state of suspended animation, notwithstanding the many and obvious ad-

vantages of such an arrangement. Looking for the explanation of this phenomenon we have no trouble in finding it in the insoluble problem presented by the question of commercial intercourse between the parent country and her colonies. And as it stands, it must ever remain insoluble. But let there be, once for all, a full and frank recognition of these two propositions, to wit.: (1) that each social organization can grow a crop of wealth for itself upon its own soil by a scientific exploitation of the natural laws of wealth-generation; and (2) that each member of the Federation has the right to regulate its own business affairs, with open and recognized preference of its own material interests —let this be the understanding from the start, and it seems difficult to suggest any further obstacle to a consummation which—at least from the point of view of British patriotism—is so devoutly to be wished.

Finally, a reference to the related facts will exhibit in a surprising manner the comparative insignificance of the returns which England is now reaping from all her sacrifices* in support of her traditional but now manifestly-belated foreign-trade policy. This is a most fruitful inquiry, and might well engage the most competent for the work in an exhaustive survey of the ample statistics available for the purpose. By way of example, the following figures may be culled from the statistical tables, selected from the British census of 1881, and appended to Mr. Jean's *England's Supremacy*, to which reference has already been made by us. In the first place, we find that an advance of less than two shillings per day in the wages paid in the United Kingdom, would have conferred on the labor-

* Those relating to her agricultural interests, for example.

class of the nation new consuming-power equal to the entire value of the exports for that year; and, further, that the home Demand employed the industries of the country during the same period in the ratio of four to one of the employment afforded by the export trade. Such facts are eloquent, not merely as to the limits to which the results of that once so triumphant policy are being reduced, under the changes which the lapse of time is bringing about, but also respecting the prospects of a still further reduction in the, by no means, distant future.

But the space allotted to this discussion has already been exhausted, and we must, perforce, proceed to another topic, begging the reader to supply for himself the retrospective glance over the facts and considerations presented above, which must decide the question of the completeness, or the contrary, of the verification thus presented of the original proposition that the Foreign Demand System must, under the operation of natural law, eventually develop forces adequate to its destruction. We, therefore, here drop this case of the nation supreme in productive power, seeking the foreign Demand through the exercise of that advantage, to take up that of a nation, markedly inferior (at that time) in that particular, but induced to seek a market for its crude products among the more advanced nations, through the working of the classic principle of "goods for goods."

(2.)—*The Russian Experiment.* The Emperor Alexander I., under the influence of Henri Storch, a distinguished follower of Adam Smith, threw open the ports of Russia to the trade of the world. The

programme was, that the imports would be settled for by exports: the more freely the Russian people purchased foreign goods, the more freely would the foreign peoples purchase Russian goods. What happened was this:—As regards buying, the great bulk of the manufactured articles consumed in Russia were laid down in her markets at prices with which the Russian manufacturers could not compete. As regards selling, the foreigners who had, previous to the reign of tariff-reform, bought Russian products because they were to be had on terms more favorable than they could obtain them elsewhere, continued to buy as before. The foreigners who had previously refrained from buying Russian products because they could do better elsewhere, continued to refrain, and for the same reasons as before. Russia, in fact, found herself in the position of “the inferior man” in Ricardo’s famous hypothesis, only that, although she had let out to “the superior man” (England) the job of making her shoes for her, she failed to obtain in return the contract for making England’s hats. After ten years of trial, Count Nesselrode issued a circular to the Powers, recalling the invitation to trade at the free ports of the Russian Empire. The reasons for the change were explained thus:—Russia found herself forced to resort to a system of independent commerce. The products of the empire failed to find markets abroad. The manufacturing enterprises of the country were exceedingly depressed. The coin of the country was rapidly flowing out to distant nations; the most solid mercantile establishments had become endangered, and agriculture and commerce, as well as manufacturing indus-

try, were not only paralyzed, but had been brought to the brink of ruin.

About the facts of this case there has never been, and there never can be, any question. Its history, in all its details, has been given to the world by the Russian Minister of Finance, George, Count Cancrin, to whom was confided the task of averting the impending universal bankruptcy, private and public, and restoring the country to its normal condition. England's experiment was originally, and for long thereafter, so well adapted to the conditions then prevailing that it has already seen some five centuries; whereas Russia's—requiring conditions which never have obtained, and never can—was so short, sharp, and decisive that a single decade sufficed to put the results beyond question.

We need occupy but little space in discussing the verification which these facts of experience afford of our *a priori* conclusion that there is nothing in the normal phenomena of international trade among the advanced modern nations to establish a relation of cause and effect as between the purchase of goods in country A by a citizen of country B and the purchase of goods in country B by a citizen of country A*; in other words, that the goods-for-goods doctrine of the classic Political Economy is a figment of the imagination.

(3.)—*Experiments in the Development of the Home Demand.* Next in order arises the question of national experience with the policy of developing Demand at home instead of seeking it abroad. But here we find com-

* Save, of course, the comparatively insignificant exception noted in the original discussion of the subject. (See page *supra*.)

paratively little to reward our labors. We yet live in the Unsystematic Period and under the influence of a science of economics whose effects upon modern economic legislation have already engaged our attention in connexion with another branch of our subject. Whatever of legislation not accordant with the classic theory of international exchange has been experimented upon by any modern nation, it has never been based upon a truly-scientific conception of the natural laws controlling international commerce; there has been no stability in any public policy relating thereto (the subject being given over to party politics); and the facts as regards the results of such legislation have been invariably disputed in less of a scientific than a partisan spirit. Furthermore, there has been no systematic effort as regards the regulation of the influx of foreign labor. Under such circumstances, the safest course would seem to be to pass over the complex phenomena of these unsystematic efforts, at least until we have seen whether there is any need of such evidence as we might gather therefrom.

6.—SUMMARY OF THE PRINCIPLES OF INTERNATIONAL TRADE.

Looking back now over the entire field of our investigations relating to this subject, we perceive that, to the business economist, the principles of international trade are simple and easy of comprehension; the only difficulty connected with the study thereof being foreign to its nature and of purely artificial origin. What, then, are those principles?

IMPORTATION.

1. Where the commodity in question can be produced at home at less cost than it can be imported from abroad, it should be produced at home. The application of the principle that the wages of the labor and the profits of the capital do not figure in the cost of the home product, but do enter into the cost of the imported substitute, will render the decision an easy one in respect of the bulk of the great staples of a nation's consumption.

2. Where the commodity cannot, under existing circumstances, be produced as cheaply at home because of the absence of conditions which it is feasible to supply, it will be a simple business question as between the sacrifices involved in providing the required conditions and the advantages to be derived from the increased productive power permanently acquired by the nation.

[After these tests have been applied, the little that will be left to be decided will fall under the general principles already worked out.]

EXPORTATION

1. So far as concerns the labor and capital employed in the production of the exported commodities, we accept the principle that the earnings of the Labor and Capital of the exporting nation, as represented by the difference in value as between the raw materials and the exported goods, measure the gain which the performance of the productive process brings to the nation.

2. As regards the materials entering into the production of the exported commodities, it is to be borne in mind that whereas the nation's labor and capital are used but not used up, the reverse is true of the physical objects destroyed as a requisite of the productive process, or incorporated into the product; and that, in consequence, the materials in the case are to be regarded as so much wealth spent, sacrificed, parted with: as so much permanently withdrawn from the nation's resources in material. In virtue of this fact, regard must be had to the special circumstances in each instance, and care be taken to discriminate systematically between cases where the resources are practically inexhaustible, as in the exportation of coal from England, and cases in which the exportation of the material signifies the sacrifice of a certain measure of productive power for all after time:—such as we have seen exemplified in the exportation of plant-food from the soil of Virginia.

Without claiming that these two simple propositions suffice for the settlement of every practical problem that can arise in connexion with the subject of a nation's export trade, it is yet permissible for us to pass over the discussion of minor contingencies on the same grounds as we have just set forth in respect of the principles controlling Importation.

CHAPTER IV.

PRODUCTION (IN THE BROADER SENSE.)

There remain many phenomena yet to be considered, which we can by no means afford to overlook. They can best be studied without reference to the extent to which they, or any of them, pertain especially to one or other of the departments of Production, Consumption, or Exchange, and hence we classify them as belonging to Production in the broader sense. Certain of them can be grouped together through their common relation to a subject which we shall employ as the means of bringing them before us in systematic order, as follows:

The Consequences to Human Progress of the Substitution of Machinery for Manual Labor.

Five several subjects of inquiry suggest themselves here, namely, (1) the effects of the Factory System on the individual working man; (2) the prospects as to the continued expansion of the consuming power keeping pace with that of the producing power; (3) the future of the Western civilization under the influences of the continued substitution of machinery for humanity; (4) the place of the plan of developing productive power through this substitution, in the general scheme of human progress; and (5) England's part in carrying out the plan aforesaid. Let us take these up in order.

I. THE EFFECTS OF THE FACTORY SYSTEM ON THE INDIVIDUAL WORKINGMAN.

A hasty view of this subject conveys the impression that it is one of great simplicity. What could be plainer? The interests of the labor-class, in common with those of the other classes of society, must be subserved by the increase of man's command over nature. But a closer inquiry brings to light certain phenomena which would seem to antagonize this hypothesis, and, hence, to suggest the possibility of something overlooked in our summary generalization. Our method, therefore, compels our attention to these. To this task we will now address ourselves.

a.—The Evils of the Factory System. We visit a modern cotton-mill. We note the gigantic force exerted by its motive-power. We stand in mute admiration of the speed and accuracy of the movements of the carding, spinning, and weaving, machinery. How trifling, in comparison with the output of such an organization, would be that of the same amount of labor as is here employed, if the work were done by hand, according to the methods of the old ante-factory-system days! How the human element in the production of cotton cloth has dwindled into insignificance under the encroachments of machinery!

Nor is the change confined to the relative *amount* of labor required. Observe how different are the requirements, also, as regards its *quality*. We have learned to appreciate the reward which work bestows upon the worker, in the development of his powers. See, then, how inferior are the opportunities for such development under the new, as compared with the old, sys-

tem. Had we, but half a century past, looked into the workshop of a rural gunsmith of that period, we might have observed him, now shaping a gunstock, now working out the details of a new style of lock, now forging a trigger, now engraving the silver mountings, now casting and finishing the brass fixtures, now boring and rifling the barrel, and, anon, assembling the parts and adjusting the sights. His calling requires that he should be a skilled handicraftsman in each of the trades of which we have indicated but a part. To-day we visit instead an arms-manufactory, and there find the counterpart of our ancient deft artificer in wood and metals, bending over a lathe, on which it is his daily, yearly, and life-long task to finish to a certain gauge an endless succession of precisely similar pieces, brought to him in the rough by the bushel or hundred-weight, from a machine which, at a single blow, stamps each into the form in which he receives it. Whatever this contrast may signify of improvement in the manufacture of arms, it certainly does not mean progress for the labor concerned.

b.—The Advantages of the Factory System. We have noted how the factory-system has dispensed with all but an insignificant fraction of the labor-element in the manufacture of cotton cloth. Let us now revisit the mill, to take note of some points overlooked before. We stand before a great range of steam boilers. How long could these, with all their powers of destruction, be trusted without the intelligent watchfulness that presides over and regulates the water-supply, the steam pressure, and the rest? What would avail all this wonderful array of whirling and

clattering mechanism without the brains and hands of the alert attendants? How inert, helpless, futile, all this enormous expenditure, all these triumphs of invention, lacking the intelligence that imparts to them life, energy, productive power! How vastly has not machinery enhanced the importance of the human element in production!

We see, then, that the true significance of the phenomena here is this, namely, that the introduction of machinery as exemplified in the factory-system reduces greatly the amount of labor required, but increases the efficiency of the labor retained. The consequence of the change is this, that the ratio between the fund created for the remuneration of the laborers and the number of the laborers among whom it is divided is altered in a manner advantageous to such of the laborers as are still employed. The question of the interests of the laborers who are thrown out of employment will be considered presently.

Turning next to the subject of the quality of the labor demanded under the factory system, the most superficial investigation of the related phenomena convinces us of the existence of a marked tendency in the introduction of machinery toward the shortening of the hours of labor. It is in this way that the loss of opportunities of development involved in the diminution of the requirements of the factory as compared with those of the handicraftsman's independent workshop is offset by the advantages accruing through the right use of the leisure hours secured to him by the change. The factory "hand," as a rule, derives little of mental expansion from his work as compared with the apprentice,

journeyman, and master-workman of the preceding system; but he has opportunities in another direction which, if duly availed of, will give him a broader intellectual development than the older industrial organization afforded. It will depend on the character of each individual workman whether the spare hours at his disposal, the free library, the meetings of his labor-association, etc., produce results upon his intelligence which shall compare favorably with those which he would have experienced under the conditions of the ante-factory-system period.

We may treat the subject according to commercial methods. We may open a debit-and-credit account, giving to the ante-factory-system period credit for the favorable influences of the domestic workshop of the handicraftsman, and to the factory system credit for the lessons in subordination and systematic industry inculcated by the discipline of the factory, and in altruistic feeling and in power of associated effort derived from the trades-union, and the opportunities of intellectual expansion afforded by the increase of the portion of each day placed at the workingman's disposal. The drawbacks to each system severally would then appear as debits on each account. Such a method of marshaling the facts would show how much there is to be said on either side, and would emphasize what has been said above respecting the degree to which the character of the conclusion must depend on the use which each individual makes of the additional time which the factory-system places at his disposal.

But this would, at best, be a most inadequate view of the facts. When, on the contrary, we broaden our

view, embracing within our range of thought, not simply the other benefits which the grand-scale production—the results of the introduction of machinery—has conferred on Labor, but also those conferred on the rest of society as well, we see that we have been overlooking the main feature in the case. When we reflect that it is to the use of machinery and the results thereof that we owe, not simply the enhancement of productive power, but the bulk of the modern advancement in human knowledge at large, including the great body of modern science; in other words, that to it we owe the civilization which gives to the workingman's leisure (and the advanced nation's daily existence) the opportunities for acquiring and satisfying in continued succession an ever-improving body of needs and aims;—when we recall these facts, we perceive at once that there would be no profit in pursuing further what is manifestly but an unlimited accumulation of argument on the side of the change. We proceed, therefore, to take up the next subject of inquiry, to wit:—

2.—WHAT MUST BE THE ULTIMATE OUTCOME OF THIS
PROGRESSIVELY INCREASING ELIMINATION
OF THE HUMAN ELEMENT IN
PRODUCTION?

Swayed by the deeply-rooted pessimism which underlies the entire body of the conceptions of the classic Political Economy in respect of the future of the labor-class, certain well-informed and thoughtful prosecutors of social science have cast the horoscope of humanity, so far as concerns the command of man over nature, as follows :

The substitution of machinery for hand-labor is attended at its outset by disaster to those whose labor it supplants. The adjustment once completed, a period of enhanced remuneration of both Capital and Labor follows, and all seems well. But the tremendous impetus which the marvellous profits give to production inevitably pushes it too far, with consequent reaction, stagnation, and depression of both factors in production. Up to the present time, but little of this ultimate effect has been felt ; its pressure being mitigated by the succession of new fields of enterprise offered. But this relief is necessarily limited, and must, at the present rate of movement, rapidly decline to comparative insignificance—and thenceforth, what? Inevitable shrinking of opportunities of employment pressing harder and harder on the labor-class until a readjustment through hardship and want shall have fitted its numbers to the diminished proportions of the demand for its services. In support of this position, they set forth the following arguments :

“ How is it possible,” they urge, “ that consumptive power shall continue indefinitely to keep pace with the productive power, which is as certain to be developed by the forces now set in action, as any event in the future history of humanity can possibly be? Observe what has already come to pass. Take the average of the manufacturing industries, and it is under the mark to say that each workman now employed in such industries has quite as great an average productive power as had one hundred men in the days of Adam Smith. What must be the ultimate effect of such tremendous forces upon individual and national

welfare, if this vaunted 'march of improvement' continues, without a commensurate increase of the individual's power to consume?"

The answer must be sought in an appeal to the facts of experience. Respecting these there can be no rational controversy.

No intelligent inquirer who has taken the trouble to inform himself properly on the subject will deny that, in those countries which exhibit most conspicuously the effects of the substitution of machinery for hand-labor, although ninety-nine out of the one hundred workmen required, a century since, for the production of a given quantity of goods have, on a general average of manufacturing industries, been dispensed with, the remuneration of labor in those countries, measured by what a day's labor will purchase, has been more than doubled.

Now from the point of view of our business science, a phenomenon such as this can have but one explanation. The fact that producing-power has been increased one-hundred-fold, while consuming-power has increased at a rate to cause such a pressure of the labor-demand upon the labor-supply, as to produce an increase of one hundred per cent. in labor-remuneration, is conclusive proof of the existence of the relation of cause and effect, as between the increase of productive power and the increase of consumptive power. Such a hypothesis fully explains all the phenomena of the case, and—unless we have overlooked something—no other will explain it at all.*

* We have here an example of the utter futility, for business purposes, of the *a priori* method, when its conclusions are

It would be permissible for us to stop here and treat the coördination of these movements as an ultimate fact, beyond which we need not inquire, so long as no phenomena were encountered inconsistent with this generalization : but, in point of fact, we *can* go further. We can describe the process by which the expansion of the producing-power causes the expansion of the consuming-power. Not only so, but we shall discover in the principal thus brought to light, a remarkable source of suggestion respecting the most fundamental elements of our Theory of Human Progress.

In the first place, let us inquire what are the requisites for the increase of consuming power? Consumption has two bases ; one is psychic, one physical. The psychic basis is supplied spontaneously, automatically, by the individual members of the nation. There is no danger of deficiency in the supply of this force. Where population is, there will be found wants in abundance. (All our remarks in the present discussion have reference exclusively to nations of the most advanced of existing types.) As regards the physical basis, it is supplied by the products of productive operations already accomplished. (When the product itself is not the object desired by its possessor, it is easily converted thereinto, through the working of the

accepted without previous submission to the verification-test. Observe how absolutely preposterous, on *à priori* grounds, would appear the reasoning which should make the same forces which produce a shrinkage of 99 parts in 100, in the labor required for a stated amount of production, to be the cause of an expansion of 100 per cent. in the price of labor.

institution of exchange by sale and purchase.) But the mere increase of productive-power is not adequate in itself to insure a corresponding increase in consuming-power. There must also be a wide distribution of the wealth produced. Individual wants are extremely limited as forces in the creation of consuming-power, so far as concerns the great staples of consumption, such as food and clothing. No increment in wealth, beyond a certain very limited range, can secure the consumption of a greater amount of food or clothing—we omit the element of cost—by any one person. It is in this peculiar feature of the history of the most progressive nations during the last hundred years—to wit., the wide diffusion of wealth—that we discover the secret of the sudden and vast expansion in the consuming-producing, producing-consuming, cycle. It is the sudden expansion of Demand that has caused the corresponding expansion of productive-power through the introduction of improved processes. These would never have been born, or would have died in their earliest infancy, save for the vastness of the scale on which the consumption supported production ; and the expansion of the demand was due to the wide distribution of the wealth created. The new question therefore is, "what was the cause of this width of distribution?" It was due to the power of Labor to exact a constantly-increasing price for its services. Whence, then, this influential position of Labor? It had two bases; one physical, the other psychic. The physical basis was the actual, material, wealth, constantly enlarging in volume by reason of the constant improvement in methods, chiefly mechanical. The psychic basis was supplied by the

growing intelligence of Labor and its accumulation of experience in the methods of enforcing its demands.

We thus recognize in the introduction of machinery as a substitute for manual labor, the ladder whereby Labor has climbed to its present position and is assured of climbing still higher. The improvements in machinery created the factory-system ; the factory-system lowered the price of goods and raised the price of labor, thus enhancing the comfort, and thereby the character of the laborer—the latter tendency being reinforced by the training in associated effort among employees necessarily incidental to the factory system. These forces operated to produce two results, namely, (1) an increase of a hundred-fold in power of wealth-production ; and (2) an increased and constantly-increasing share for labor in the wealth produced. We shall revert to this subject presently, after a brief digression concerning the next subject of inquiry, to wit.,

3. THE FUTURE OF THE EXISTING WESTERN CIVILIZATION.

It is of course perfectly legitimate to reason from the known to the unknown, and to accept as conclusive the results arrived at, if the circumstances conditioning the two cases are in all respects similar; but these results will be misleading in direct ratio with the extent of the diversity between the conditions prevailing in the two cases severally.

When, therefore, it is argued that there is nothing in the history of ancient civilizations, whether past and gone or enduring down to our own times, to justify the

expectation that we have reached the end of failure in human effort toward progress, we answer that there is this much of justification, namely, that we are able to designate both the causes of past failures and the new conditions on which we found the expectation of a future continued march of improvement without visible limit. These we particularize as follows :

In the first place, referring to the perished civilizations, enough has been preserved of their institutions to show that, however advanced may have been their progress in other directions, and especially in that which concerns us most at present, to wit., their capacity in wealth-production, the elements of environment and of individual character that alone could have secured for Labor the requisite remuneration were lacking. The lesson taught by the experience of the nations which have left their marks on the plains of Chaldea, in the valley of the Nile, in Persia, the Grecian Archipelago, and the Italian Peninsula is this, that no social and political organization can command permanence in progress whose labor-class fails to achieve for itself the means for an enjoyable and independent existence.

In the second place, taking up the case of those ancient civilizations of Asia which have survived to the present day, the specific causes of their long stagnation can be set forth as clearly as those just assigned for the cases of absolute destruction. China had progressed far enough in the substitution of machinery for hand-labor to present unmistakable object-lessons on the hardships inflicted thereby on the handicraftsman. These examples suggested possibilities for the future

of that teeming population so appalling that the Government instituted against the innovations measures of a severity so great as to put a sudden and permanent stop to them; and the Asiatic nature adapted itself thoroughly, in time, to a system essentially congenial to it, and which continually acquired more and more of the authority derived from its relation to a religion whose most conspicuous practical element was the worship of ancestors and of ancestral institutions. Under these circumstances, the system of capitalistic production has failed to acquire that importance in China which would make the experience of that people available for us in analogical reasoning in connection with the present subject. This much, however, can be said, viz., that the remarkable permanence and stability of that civilization is due to the fact that its institutions are so largely based on the controlling idea of its customs and its laws, namely, that the happiness of the great mass of the population should be the chief aim of Government. It is to the barbarity of the outside nations, not to anything within its own system, that we must attribute everything that to-day threatens the stability of that vast empire. In, by, and of itself, it presents the spectacle of a civilization which, assuredly, cannot be cited in support of the proposition that, as a matter of invariable human experience, each form of civilization, when not drowned out by a flood of foreign barbarism, has evolved within itself forces adequate for its overthrow. The case of India presents some features of difference as compared with that of China, in respect of this question of the conditions under which the permanent arrest of its indus-

trial developement, and consequently of its civilization, took place. Aside from other disturbing influences, such as the rapacity of domestic tyrants and foreign invaders, two great adverse forces suffice to explain all. These were (1) a religion which regards material prosperity as one of the least important of considerations, and (2) the institution of Caste, paralyzing every aspiration in the soul of the man born to the condition of dependence on the work of his hands.

It is plain, therefore, that the basis for the reasoning from analogy which we have been discussing is not supplied by the circumstances of the case. Nevertheless there exists a certain broader analogy which suggests things not to be passed over without mention.

While it is not permissible, as we have just seen, to reason that, because progress has, under certain conditions, been thwarted in every instance heretofore, it, must always be thwarted hereafter under different conditions, yet it is entirely proper to argue that the fact that, in every instance in the past experience of the race, an advancing civilization has developed forces whose pressure has been manifested either in permanent arrest of movement or in utter destruction,—that this experience, extending as it does through so vast a lapse of time and exhibiting so great a variety in the conditions under which each several attempt was prosecuted, establishes a strong probability that the Principle of Evil, which has hitherto invariably proved adequate, in some way or other, to the defeat of each forward movement, will still be found equal to the requirements of each new conjuncture of circumstances. And, resorting to the verification-test, we find that the new for-

ward movement has developed equally novel antagonistic forces, already become so formidable as to demand our serious attention.

Hand in hand with the growth in wealth-production and the amassing of thousands of millions of dollars of surplus labor-earnings in savings-banks, in building and loan associations, in homes, etc., there has spread abroad among the populations of the most advanced nations a spirit of discontent which has simply to go on increasing at the present rate to end inevitably in an explosion. And the worst of it is that this disruptive force is clearly traceable to the prosperity of the labor-class; growing with its growth and strengthening with its strength. Have we not here, then, a simple repetition of the old unvarying experience? Is it not so that once again the forward movement develops the means of its own annulment?

To answer this question we must trace out the *modus operandi* of the process which thus converts sources of satisfaction into causes of discontent. But to treat this subject exhaustively would require more space than can be accorded to it in the present work. The most that we can do, therefor, is to sketch its main outlines in the rough, as follows :

We discover two leading sources of the prevailing agitation. The first is to be found in that principle of human nature with which we have already become so familiar under the name of the Evolution of Human Wants. As the labor-class becomes habituated to a reasonably-secure provision for the mere physical needs of daily existence, the pressure of the desire for things more psychic in their relations—for comforts that

appeal to a more elevated taste, for opportunities of pleasurable leisure, of intellectual cultivation—are more felt ; and discontent follows privation. All of this, in the form of legitimate aspiration, we recognize as wholesome ; and it is hard to imagine any evil consequences to be apprehended from it in the absence of its combination with the second source of trouble, namely, a deep conviction of wrong inflicted upon Labor, primarily by Capital, and secondarily by the nation under the influence of Capital.

The next step in our inquiry, therefore, is to determine whether this dangerous conviction is based on something inherent in the new order of things and hence incurable, in eradicable ; or whether it is in fact an excrescence, a diseased growth, due to causes distinct from those which condition the existence of the body it defaces—as the gall-bladder of the leaf is due to the virus injected into the otherwise healthy tissue, by the pestilent gall-insect. This is a question readily answered from our point of view. The growing resentment against the existing social and industrial arrangements, so far as it arises from a conviction of their unfairness—and this is the secret of its strength—is as much the product of the doctrines of the Classic Political Economy, as the acorn is the product of the oak tree.

We have already obtained some light on the question of the possibility of removing this dangerous sense of wrong by disestablishing the authority of the system responsible for its existence (see page 248), and we shall come upon much further information on the same subject hereinafter. We shall therefore econo-

mize time and space by closing the discussion for the present, where it now stands: to be taken up again when occasion serves.

Accordingly, we now resume the line of investigation which started out with the aim of explaining the causal relation between the development of Production and the development of Consumption, and which (see page 183, *supra*) had led us up to the next stage of our researches, to wit.

4. THE THEORY OF THE SCHEME OF NATURAL LAW
FOR THE DEVELOPMENT OF THE CONDITIONS
WHICH HAVE MADE POSSIBLE THAT CYCLIC
MOVEMENT OF WEALTH-GENERATION WHICH
PLAYS SO CONSPICUOUS A PART IN OUR GENERAL
THEORY OF HUMAN PROGRESS.

The requirements for the realization in practice of the cyclic movement in question, as we have already seen, are these:—There must be grand-scale production, and for this there must be grand-scale consumption. Now there did not exist, at that period in the evolution of the present Western civilization when the movements concerning which we are now inquiring had their inception, any basis for the development of such consumption within any nation then in existence. In consequence, the expansion of production was possible only by securing abroad such Demand as might in any way be made available. Two methods of securing this *desideratum* presented themselves. For the more civilized countries, the plan must be to underbid their home products; for the ruder populations, those that refused to trade must be coerced. The Demand

thus secured was adequate to support production upon the grand-scale or machinery-system which was accordingly placed on a secure foundation: but it is manifestly not adequate for the generation of wealth in the vast proportions requisite for the satisfaction of wants on the scale of magnitude required for the realization of the scheme of human progress set forth in our Chief Hypothesis. The next requisite, therefore, is the development of consuming-power beyond what was possible under the foreign-demand system. This new increment of Demand can be developed from but one source, to wit., the nation's own labor-class. This again, can be done in but one way, to wit., by having the wealth generated go chiefly into the possession of that class. This movement, furthermore, can be effected in one way only: it must be accomplished by the labor-class itself.

All of these successive steps have either been already effected, or, although still in process of evolution, are already so far advanced as to give assurance of their ultimate development up to a certain limit prescribed by natural law, as will be understood later. Observe now the corroboration and reinforcement which this body of phenomena afford to our chief hypothesis. In the same way that the discovery of the natural scheme of wealth-generation through the cyclic movement gave support to that hypothesis by showing the existence of a plan for providing the comfort-element in the scheme of progress, does this evidence of a further plan for preparing the conditions requisite for that cyclic movement add new sources of confidence in our

entire Theory of Human Progress, as a whole and in all its details.

5. ENGLAND'S PART IN THE DEVELOPMENT OF NATURE'S SCHEME OF WEALTH-GENERATION. Let us formulate our inquiry here as follows:—A new order of things is now placing itself in evidence with rapidly-accumulating force, indicating beyond question a new factor in modern progress. Tracing the related phenomena to their sources, we find two such, namely, (1) the exceptional development of man's command over nature; and (2) the increased share which the labor-class is securing of the wealth thus created. Our present subject of inquiry is the part borne by England in supplying the conditions requisite for this successful realization of the scheme of natural law which has eventuated in this new condition of things.

In the first place, there was a nation. There was Segregation from the great mass of humanity, whereby the special qualities of this particular subdivision of that mass might develop undisturbed, in the direction desired, through the workings of reciprocal action in isolated Association. Again, the qualities of this people gave them especial fitness for the work which had devolved upon them. Steadfast, resolute, rapacious, keen of vision and hence not prone to entertain illusions, fertile in invention, untiring in persistence, gifted, as to the masses, with native sleight in handicraft, masterful, as to the ruling class, in the management of men, and saturated with the conviction that whatever was good for England must of necessity be the best thing possible for mankind at large, they seem to have been

built expressly for the service to which they were called.

To this nation came a revelation. The process of converting raw material into merchantable goods yielded wealth, and all that was requisite for the maintainance in action of this operation of wealth-culture was a demand for the goods. The hungering animal, chancing upon some stray morsels, sniffed at, tasted, then bolted them; then looked about him and beheld a vast expanse of the same succulent pasture spread out before him. With irresistible bulk and ruthless hoof and horn, he trampled under foot or tossed aside all interposing barriers. If the command of the trade of the world was the condition of achieving wealth and power, that requisite should not be lacking. Superiority in productive power, whereby to suppress the competition of the civilized, superiority in force, whereby to compel the trade of the barbarous, world—these must be attained and maintained, no matter what the cost. Thus the first requisite, the grand-scale Demand, with its consequent grand-scale production, was secured.. Wealth-Culture was, once for all, added to the useful arts;—how then as to Wealth-Diffusion ?

The same qualities which gave the nation supremacy in production gave its Labor a hold upon the wealth in the generation of which it had been an indispensable requisite. The evolution of the Trades-Union was, under the conditions obtaining, as natural, as inevitable, as the appearance of vegetal life on a fertile soil in a congenial climate. In the bargaining between Capital and Labor for the services of the latter, the

English employer found himself faced by men who knew their rights and, knowing, dared maintain them sturdily.

If, then, we have rightly interpreted the phenomena,—if it be so that the hour of the birth of the Systematic Epoch struck when the evolution of the grand-scale production was completed by the emergence of machine production and of wealth-diffusion—it is hard to put an estimate upon the debt which the race owes to England. Her virtues and her faults combined to qualify her for the great mission confided to her. Nature, according to her wont, having a difficult enterprise in hand, laid the foundations deep and sure in the solid rock of Greed. She established the Foreign-Demand system in order that the grand-scale production might be established. The great profits with which that nation was led forward in the work are now dwindling away, as the need of the foreign-demand system disappears; and it is easy to forecast the coming of the day when the same love of gain will be exploited to secure the abandonment of that system, now that its time of usefulness is over-past. But nothing in the future can impair the force of the fact that to England we owe those steps in the evolution of Wealth-Culture, without which both the Art and the Science of Human progress would be *nil*, because human progress itself would have remained an arrested movement.

Let us now address ourselves to a somewhat different line of investigation, and inquire respecting the consequences to human progress, other than those above

described, which have flowed from England's Pursuit of Demand in foreign fields of action.

In the case of the useful or business arts, it is the general rule that the Art precedes and supplies the data for the related Science. This has been conspicuously true of the science of Political Economy. The amazing success of the English art of cultivating a crop of wealth has caused the general adoption of the English Science of Wealth. Its adoption in the country of its birth by the professional and professorial economists was secured by reason of the harmony between the predicted and the actual results of the acceptance in practice of the principle of freedom of contract in international trade.* Its adoption by the practical statesmen of that country was due to the admirable manner in which it inculcated upon the nation of inferior productive power, contented approval and acceptance of England's demand-monopolizing policy, and demonstrated the perfect reciprocity inhering in such a mutually-beneficent arrangement. Its sincere and fervid "*laissez faire*" was silently recognized by

* Cairnes unwittingly furnishes a striking example of this while arguing strenuously against the admission of any such considerations into a scientific discussion of economic principles. ("Logical Method," I., 1.) He complains that "when the immense success of free trade gave experimental proof of the justice of those principles on which economists relied," a large body of mere sciolists undertook the rôle of philosophers, and even those better instructed left the high realms of pure science to find a more popular vindication of their system in the business arena of concrete facts.

There would appear to be several points of interest in the above. In the first place, observe that the expression "gave

the shrewd practitioner in diplomacy as signifying in practice the endorsement of England's admirable suggestion, "Let *me* do that!" In his eyes, the English philosophy of international trade was "manufactured exclusively for export." He understood with perfect business precision—for it was his constant purpose to move heaven and earth to bring it about—that wealth came to a nation through the employment of its labor and capital; but he was quite content to accept as merely an abstract principle for himself, but as a truth to be applied in concrete practice by the foreigner, the proposition that the Demand he was after was a matter of no consequence to the natural owner of it, to wit., the country in which it came into existence. It is quite unnecessary to impute any deliberate intention on the part of those in power to plot a scheme of deceit as against foreign countries, much less to imagine any corrupt conspiracy between the Science and the Diplomacy of the nation. All the phenomena of the case are readily explained by the assumption of absolute good faith on the part of British Science, and, on the part of British diplomacy, the feeling that there was no

"experimental proof" seems capable of no other interpretation than a citation of the fact of the success of the experiment as a "proof" of the soundness of the principle on which the action in the case was founded:—which is the precise thing to which our author is objecting. Again, what is this appeal to the facts of experience but that very process of verification by appeal to statistics, which figures so largely in Cairnes's theory of Method. Finally, how does the reference to "experimental proof" of the correctness of a certain policy in legislation square with the author's elaboration of Mill's position that all evidence from results is, in this class of cases, worthless?

call to go further into the matter than to make sure that the way things were working possessed the only virtue known to diplomacy, to wit., advantage to its side. The English statesmen therefore, cheerfully accepted the economist's doctrine of *laissez faire*, applying it in the more familiar sense, and let things go on as they were going. Thus the institutions of learning, the leaders in philosophic thought and in scientific research, and the directors of the policy of the nation joined forces in the creation of a propaganda of the doctrines of the classic Political Economy.

When we bring the above facts into the discussion of England's services to the cause of progress, and at the same time call to mind all that we have recognized respecting the inestimable benefits to be derived from the discovery of a systematic science of progress, we perceive that the race has a heavy charge against her as the express inventor and propagandist of a pseudo-system that to-day constitutes the most formidable obstacle to the evolution of the Systematic Era.

Taking all these facts together, it would seem that the relation of England to the cause of economic progress has been one of great importance, but of a very mixed character. Absolutely indispensable as regards those initial movements out of which the grand-scale system of production has been evolved, her economic science is now causing her to figure as the chief obstructionist in relation to the later developments of the progress to which she had originally contributed so much.

But the qualities which have caused her to play so large a part in the past and present, make it certain that she is not to drop back into insignificance in the

future, but, on the contrary, when her sound business sense once wakes up to the fact that *laissez faire* is getting to signify—"Let other nations do the producing," she will see that her conservatism is beginning to be anything but conserving, and will forget *laissez faire* science in her eagerness to keep up with the progress of the times.

Reverting to the original question, to wit.: What are the consequences, as to human progress, of the substitution of machinery for hand labor? We answer, that, notwithstanding the many and serious drawbacks which still attend upon the Grand-Scale or Capitalistic organization of industry, it has already approved itself the one great motor-force of human progress because of its function as the one great want-satisfier.

Having now, to all appearance, covered all the essential phenomena relating to the subject, we proceed, in accordance with our method, to inquire for the something overlooked, and as we seldom drop in that net without bringing up something worth the trouble, so here we come upon a matter which, the more we look into it, the more full of suggestion does it prove. The classic Economic Philosophy, having no system of its own, it naturally never occurred to its prosecutors to inquire whether such a thing was anywhere in existence; but our method exhibits us to ourselves as overlooking an Economic System which, when we come to make ourselves acquainted with it, we find to contain much that is instructive to us. In contrast with the shortcomings of our Western civilization, the civilization of the East, as represented by that of China, boasts an economic philosophy which exhibits a pro-

found knowledge of human nature and an equally remarkable sagacity in applying that knowledge to practice. This apparently-extravagant language will be found moderate and well-considered by all who inquire into the facts. Even the meagre presentment of these that we now proceed to offer—almost absurdly insufficient as it must necessarily be—cannot but give food for thought to the most incredulous.

First in order we will consider, the Chinese Philosophy of Human Life. The supreme purpose in view is the greatest happiness of the great mass of the population of the Chinese Empire—a happiness based on Content and Good Manners. As regards Content, the even balance between wants and the means of their satisfaction is to be attained as much by bringing the wants to the level of moderate means, as by bringing the means to the level of the wants. The possession of wealth by an individual in excess of that which meets the requirements of this theory is held to be a pest and a nuisance as regards the general welfare, and hence to be discouraged and obstructed as far as feasible. With this intent, the accumulator of unusual wealth is held in obloquy as a person of ignoble instincts; the fact of his having amassed such wealth being considered *prima facie* proof of his willingness to devote to money-grubbing, time that could be more advantageously employed. In consequence, the rich man, if he would hold a decent social position, must prove by his generosity and public spirit that the inference is erroneous in his case. Nature is regarded as the only party with whom one can trade without danger of

temptation to overreach. Hence no vocation is held in such honor—after the literati—as that of the agriculturist who is his own employer. In the pursuit of this calling, his habitual employment is purifying to the mind, healthful to the body, and rich in innocent enjoyment. In capitalistic production, on the contrary, the tendencies are baleful in many ways. The employer is likely to be enriched, the employee to be absorbed in work either wanting in elevating influences or positively unwholesome to body or mind, or both, and devoid of pleasurable features; and both are subjected to the demoralizing influences which must attend their bargaining respecting wages. As regards Good Manners, it is held that one of the prime factors in individual happiness and individual character-building is a general social atmosphere of goodwill and kindliness; and hence that the training of youth, from early childhood, in the home and in the school, should be especially insistent and persistent in respect of this subject; and general intercourse, whether public and miscellaneous or private and intimate, should afford a constant object-lesson to the same purpose.

How, then, does this social and economic hypothesis endure the verification-test? What are the results visible in Chinese social life? The vastness of the mass of evidence offered, and the endless contradictions which pervade it, are simply amazing, bewildering, to the earnest investigator. This much, however, we venture to affirm, to wit: that however different may be the aspects of Chinese social life in different parts of that vast and varied empire, this much must be conceded by every fair-minded student of

those reports which have reached the Western world, on the subject, from sources manifestly entitled to respectful consideration ; namely, that a large—a very large—part of it presents an ensemble of phenomena which go far to justify those “Sinophiles” who give their deliberate verdict that if the criterion of civilization is to be the general diffusion of happiness under the influence of a well-ordered existence, gentle manners, habitual cheerfulness, and the taking of the most out of moderate and innocent pleasures, the preference must be awarded to the civilization of China. Such a condition of things, persisting for so long a period, and on so vast a scale, leaves no room for rational doubt as regards the soundness of the philosophic system of which it is the product, especially in view of the formidable drawbacks under which it has been developed. Among these may be suggested—we have space for nothing beyond a mere suggestion—the low development of the religious sentiment; the inferior position everywhere theoretically and often practically assigned to women; a government of alien race, itself incapable of originating such a social philosophy; the universal and long-established corruption in every department of the government service; and the absence of the inspiration which comes from faith in human progress. It were simply irrational, therefore, as we have said, to deny to a system which has borne such fruits under such disabilities a marvellous efficiency in precisely that field of action with which our entire inquiry is concerned, and it behooves us to do our best, within the narrow limitations of the space at our command, to obtain a more business-

like conception of the Chinese social and economic philosophy. Consider once more the facts. Here is a system which while squarely antagonizing the most fundamental principles of our Western economic science, has maintained the bulk of a population of some hundreds of millions upon a higher average scale of material prosperity and of refinement in social intercourse than anything which any other known civilization, past or present, can boast ; and this, too, during a period which makes the existing Western industrial system, with its single century of experience,* a thing of yesterday. We simply must not ignore it.

Perhaps we can bring out the leading facts in the least space by recourse to an illustration, as follows :

We are standing, in company with a Chinese philosopher, at the gate of one of the great cotton mills of Manchester, England, as the "hands" file out at the evening quitting-hour. We explain to our Asiatic companion, that by the system of which this establishment is a specimen, the operation of transforming cotton fibre into cloth is performed in a manner to yield 100 yards of finished goods per capita of the cotton-workers, for every yard produced but little more than a century past. We call his attention to the significance of this change; to the cheapening in clothing of the mass of the population which is involved in such a triumph over nature ; the increased earnings of these work-people, whom this system has relieved from the depressed agricultural life of their progenitors ; the shortened hours of labor, the expanded hours of leisure, and the enlarged opportunities of all kinds for the develop-

* Experience, that is, of large-scale Capitalistic Production.

ment of intelligence and the social virtues. To all which he makes reply thus :

“ These people,” he says, “ passing out of this gate, have worked here some nine hours to-day, you tell me; making, with the stop at noon, say, ten hours in the twenty-four. The rest of their working hours they will spend as we have already seen them doing :—in the streets, in their resorts, and in their homes. You speak of economies, of marvellous reductions in cost of production : but what strikes me is the amazing, the barbarous, wastefulness of such a system. See what must be sacrificed in order that this quantity of cotton goods shall be turned out. Around the city here stretches a wide expanse of fertile land :—fertile, that is, according to Western ideas on the subject, and from the Chinese point of view, fertile potentially, in view of the opportunities for obtaining fertilizers. Speaking with an eye to what this soil would yield under our system as compared with what it now does, I see for each of these workmen, from one to three acres of land lying waste in order that he may be here. I see needless expenditure in getting supply and demand, producer and consumer, together. I see the greatest waste of all in the waste of utility in the sustenance of the working man and his family. “ What satisfaction do they get out of their food, their clothing, their shelter: mere stop-gaps as these are, standing between them and hunger or exposure? Bought with their wages, out of great stores of such, what zest is there in their food compared with that fresh-gathered in their own garden; in their clothing, compared with that which they have grown, and spun, and

woven, and fashioned in their own household, each garment associated with memories of mutual helpfulness ; in their shelter :—we have seen how this compares with the secluded family nest, set among flowers and shade, pure airs all about, and cheerfulness and mutual love within ?

“And if such is the contrast in Consumption, how much greater in respect of Production? *Some* satisfaction, however little, must be extracted from the expenditure of their wages by these human machines; but what possible pleasure do they derive from their occupation? Your entire economic philosophy regards the exercise of the faculties in productive industry as a sacrifice. So many hours of labor signify so much of a minus factor in the satisfactions of existence. And, indeed, as we see it here, what is it but a slightly-modified serving of a term of imprisonment at hard labor? Now let us describe to you how this cotton cloth and the garments made from it are produced under our Chinese industrial arrangements.

“The work is shared among such members of the family as can profitably take part in it. The head of the household, director of the operations and arbiter of all questions relating to skill, diligence, etc., exercises his governing powers upon himself and those whom he holds dearer than himself. Mutual affection makes the relations between overseer and ‘ hand ’ of a kindlier character than those of your factory. All proceeds in this household workshop in a leisurely, easy-going way, reminding one of the artist at his easel, the girl at her embroidery, but without a suggestion of negligence or indolence. Ennui and fatigue

are watchfully guarded against. The almost endless variety of work to be done is skillfully availed of, to this end. The husband and father, tiring of the heavy labor at the hand-loom, takes a turn out of doors, at the pruning of his trees, the dressing of his vines, looking after the bees, the poultry, the few animals, or at other employment calling for experience and judgment, rather than violent exertion; not the least among his occupations being the watchful and affectionate oversight of his children at their various employments, lending a hand now and then to give an object lesson in that skill and painstaking completeness which makes a Chinese acre count for so much. There is no drudgery here. The chief satisfaction derived from the labor itself is due to the active interest and pride which the workman takes in his work. The technical skill—sleight of hand and intimate knowledge of method—instilled into the Chinese child, youth, and man, gives to each somewhat of that delight with which the successful artist wields his brush, the practiced sculptor shapes his modelling-clay. Each working hour is as full of content, as rich in placid satisfaction, as the hours of rest. Each gives zest to the other. To miss either would be alike regrettable. Nor are these hours of cheerful industry devoted solely to securing the necessities of existence. Much of the work, especially out of doors, is given to the embellishment of the home and its surroundings. All these are good: the enjoyable industry, the abundant and varied supplies, the pleasant entourage; but best of all is the beauty of the intercourse between the members of the household; the perfect cheerfulness, mutual helpfulness,

mutual forbearance,—the atmosphere of good-humor, peace, and love. Look at these careworn faces, recall the rudeness that marks their intercourse in their resorts, in their homes; observe the sallow hue that tells of poisoned air and dulling drudgery, and then talk to me of the triumphs of your system,—the ‘cheapening of production’ the ‘enhanced command of nature’! Take the general average of your working population subjected to this system, and what has it at command, as regards the means of an enjoyable existence, compared with what our industrial arrangements yield to our labor-class? You must concede, that there is, absolutely and positively, no sort of comparison. Nay, considering the matter from your most thoroughly ‘economic’—that is, most sordid, humanity-ignoring—point of view, how do the two systems compare in mere ‘value of product’? Contrast the value of the articles of consumption in a given time in an English population, with the corresponding aggregate for a Chinese population of like numbers during a like period, and the greater comfort of the Chinese masses will far outweigh the greater luxury of the English classes.

“The reason for the difference between the two lies upon the surface. In the one case, we have the results of a thoroughly reasoned-out system; in the other, those of a blind seeking of each individual after his own individual advantage. Our sages, in the remote past, recognizing labor as an inexpugnable fact of human terrestrial existence, sought to extract therefrom the maximum of possible good, having regard to

ultimate results in individual happiness. Their plan of procedure was as follows:

“In the first place, this exercise of the faculties was to be conducted under the most favorable conditions attainable. The material surroundings; the intercourse between individual and individual incident to the work; the mental and bodily operations themselves—each and all were to be made sources of satisfaction: all were to be so ordered as to contribute material for a pleasurable existence. It is these abstract principles reduced to concrete practice that make the life of the labor class of China such as I have pictured it in describing the Chinese substitute for the Western cotton-factory.

“In the second place, the lesson inculcated with ceaseless, tireless, persistence, equally with that of excellence in handicraft and good manners, is the priceless value of Moderation, lacking which, content is a stranger, though wealth and power are boundless.

“In sum, ours is a civilization which has mastered the problem how to make the most of life; yours is not.”

What then? Have we prosecuted our long inquiry, working out, with infinite pains, the significance of the complex and endless phenomena with which we have had to deal, in pursuit of the system underlying all these discordant appearances; and having, as we suppose, arrived at such knowledge of that system as will enable us to reduce it to practice:—have we done all this, only to discover at last that the system itself, in comparison with another and different one evolved from a different civilization, is so far inferior to that other that

our wisest course is to drop it and take up that whose fruits do so manifestly demonstrate its superiority?

In this perplexity, let us once more have recourse to our now familiar logical expedient, and inquire what it is that our Oriental philosopher has overlooked in his sweeping condemnation of Occidental industrial arrangements. Several things become plain as soon as we look for them, to wit., as follows:

To begin with, there is the fact that he is comparing a society having a finished and perfected industrial system, with one which, properly speaking, and having reference solely to the past and present, has no system at all; what stands for such having been recently evolved from a master-and-slave, master-and-serf, master-and servant, progression; the principle of making the interests of the labor-class a leading consideration having only begun to enter the minds of men:—and all the while, the leaders of thought have themselves been misled by an erroneous economic philosophy. As regards this limb of the comparison, therefore, we must await the results of the establishment of the Systematic Era. Furthermore, referring now to the other limb thereof, although it is true, as already pointed out, that the Chinese civilization founded on this industrial system has shown no tendency to develop within itself forces threatening its permanence, the time has at last come when it is seen to be inadequate in itself for a successful resistance against certain forces from without, which, unless thwarted in some way not within the resources of the existing organization, must overwhelm it with a flood of disaster fearful to contemplate. It is the Chinese system, then, under the dark shadow of this impending

catastrophe, that must be compared with the Western system as it will appear in the period of its legitimate development.

In the next place, Chinese civilization exhibits the spectacle of a definitively-arrested evolution. If the empirical hypothesis of the existence of a principle of progress in humanity as a feature of the cosmic order and constitution be sound, a state of stagnation is abnormal, and the conditions which have produced it, being out of harmony with stronger natural laws, must, sooner or later, succumb to the inevitable. This much, at all events, we may safely affirm on the subject, namely, that it is not in this direction that the seeker after the secret of progress will care to look.

In point of fact, we need go no further than the consideration of the state of physical and psychological science under Chinese conditions to be convinced that, however high a plane that civilization long since reached in respect of the science of social life, the Western civilization has entered upon a career of its own, which, however crude and unsatisfactory may be the present stage in its development, already affords the assurance of an evolution which, not only must one day challenge comparison with the best fruits of the Eastern system, but also maintain a forward movement without assignable limits. Thus we are brought face to face with a new problem. Again we ask, what then? Can empirical science derive no useful lesson from all this vast accumulation of rich, varied and suggestive human experience? Assuredly it can; but this inquiry relates more especially to questions of application to concrete action, and hence belongs more

legitimately to the department of practice, to which therefore, we now leave it.

We have now come to the end of our researches respecting that part of our Theory of Wealth which deals with the Production thereof, considered as an isolated movement—as simple wealth-generation; but so intimately is this subject affiliated with that of the disposition of the wealth generated, and hence with some of the most urgent problems of the day, that it will be well to postpone all discussion of the more general aspects of our subject, until we can do it in the light which will be thrown upon it by the study of the phenomenon of Distribution, which is to occupy us in the second and concluding part of this, the Third Book, of our treatise.

PART SECOND.

DISTRIBUTION.

CHAPTER I.

ECONOMIC ETHICS.

Our inquiries in this place relate to the manner in which the wealth evolved through Production is apportioned between Capital and Labor; and this with a special view to the question whether the natural scheme of progress makes adequate provision for the development of that mutual good-will between the two which is requisite, not only for the highest efficiency in providing the means of Comfort, but also for the best results in the development of Character. The first business before us, therefore, must be the determination of such abstract ethical principles as shall constitute a code to which appeal can be made for the authoritative settlement of any disputed point.

In order to be able to discuss with due intelligence the question of the ethics of the relation between employer and employee, it is necessary that we should have clear notions respecting the ethical aspects of the relation of each of these to the nation-association of which he is a member. But this need not detain us long, in view of

the facts already developed in our study of the Nation as an agency of progress. (See page 232, *supra*.)

Let us imagine a Court of Arbitration, in which Capital and Labor, embodied in an employer and an employee, respectively, are urging their rival claims on a body of wealth which has been produced by these parties jointly,* in their several rôles. The capitalist pleads that his is the larger claim because the inception of the productive enterprise, the provision of all the conditions requisite, and the management, were his. The laborer upholds a similar claim on his own behalf, because nothing could have come of the undertaking without the co-operation of himself or such as he. Then enters upon the scene a grim accusing spectre, the Un-earned Increment, and demands a hearing.

"Each of you," he says, "bases his claim for the larger share of this wealth upon the ground of the part he played in its production. Between you, you claim more than the whole; where then do I come in? You," addressing the capitalist, "say that you provided all the requisites for the work; and you," turning to the laborer, "assert that it was the exercise of your faculties that wrought the change from raw material to finished goods. But strike a balance, each of you, between yourself and the nation which provided the environment which enabled one of you to acquire and preserve the wealth here employed, and both of you to reach that mental and physical development which qualified you for this work: make the proper correction and then present your amended pleadings."

* In the sense explained (see page 462) in connexion with the subject of the "contribution" of Labor; and also later (see page 543.)

Need we pursue the case further? Is it not plain—we speak from a business point of view exclusively—that there is no bottom to the reasoning which is based on the theory of “natural” rights when applied to a business problem such as the determination of the respective shares of Labor and of Capital in the wealth in the creation of which each has borne a part? The data for such a decision are not to be had. The basis of the claims of both alike approach nearer and nearer to the vanishing point in proportion as we push our inquiries into the ultimate facts. For our strictly business purposes, therefore, we adopt provisionally the working hypothesis that the only way to get down to solid fact is to follow Nature’s own methods, holding the individual as nothing in comparison with the race, and making the social organization of which the individual is a part, the representative, for the nonce, of the race. This makes everything plain and simple. The precept of action which at once suggests itself is this: To Labor and to Capital each, that share which it is expedient, having regard exclusively to the good of the nation, that each should have. A sufficient verification of this hypothesis would be afforded by the discovery that Natural Law, properly understood and systematically obeyed, will bring about the most equitable distribution conceivable.

To this inquiry, therefore, we dedicate the remaining Chapter of this Part; the second and last of the present Book.* †

* It will be observed that the conclusions arrived at here are in direct opposition to the doctrine on the subject supported by the great authority of Mr. Herbert Spencer. While our inquiries would seem to establish the subordination of the inter-

ests of the individual to those of his nation, as a principle of ethics, and its recognition by the individual as a moral obligation resting upon him, Mr. Spencer regards it as a principle of abstract justice and a rule of practical action based upon the natural laws of man's being, that the connexion between the individual and the State should be minimized, even to the extreme of recognizing the right of the former to refuse all participation in the association which constitutes the latter. The challenging of such authority under circumstances such as those of the present case, may well be regarded as savoring of temerity, save for the plea of a difference in the point of view, and in the method of inquiry. Let us see whether through these we can work out our justification.

It seems plain, in the first place, that Mr. Spencer has allowed, without special investigation, the claims of the classic Political Economy to the authority due to a systematic science, and hence has accepted the bulk of its doctrines as ultimate facts, recognized as such by people of intelligence, and lying outside of the purview of his own investigations. For example, it seems improbable that he felt called upon to inquire into the bases of the classic conclusions, or ever did so, because had he done this, he must have discovered and repudiated its illogical practice of inculcating positive precepts obtained, as we have found them to have been, through metaphysical methods. Adopting, therefore, its general conclusions, as he would those of Chemistry, or Physiology, such propositions as the following would not come within the horizon of his point of view. But these are among the essentials of the general hypothesis which we are now engaged in testing. They are:

1. Human progress is possible only through the cumulative results of the mutual interactions between Character and Environment; and through the instrumentality of the nation alone is the requisite advance in the nature of the environment possible.
2. Human progress is possible only through the elevation of the nature of the Selfishness of the individual and of society; and the institutions of the Family and the Nation are the instrumentalities, each of them indispensable under the laws of

man's being, for the operation of this change in the great motor-force of human action.

Now it implies no overweening self-confidence, no suggestion of disrespect to the most eminent authority, that the humblest and most obscure of the searchers for truth should address himself to the work of comparing such hypothetical propositions as the above with the phenomena of actual life; unless, indeed, the authority in question had previously worked out such a process of verification;—and this, most assuredly, is not the case in the present instance. But it is plain that if these hypotheses should become conclusively established as positive truths, Mr. Spencer himself will find in them a sufficient answer to his suggestions, both of the encroachment of the government upon the freedom of individuals, and of the slackening of individual energy through the benumbing influences of State paternalism. For if we conceive of the true relations between the nation and the individual in respect of human progress as being those obtaining between co-operating agents, the individual intent upon promoting such national measures as shall create the environment best adapted to the advancement of its individual members in Comfort and Character, we perceive that, in final analysis, it is simply a question of the degree of intelligence prevailing at any given time; a mere question whether the individual members of the nation are at the time capable of entertaining such a conception. So soon as they are thus fitted to play their proper part in the scheme of progress, the dangers, either of the infraction of the law of equal freedom or of the dwarfing of individual power of initiative, vanish.

It seems but moderate and reasonable, therefore, to say that if, instead of the classic *laissez faire*, the above propositions can be established, the business view of the case must be that the connexion of the individual with the nation, instead of being minimized, should be such as to promote, to the largest extent possible, the efficiency of the nation as the purveyor of Education and Employment for its individual members.

As regards the extreme position of Mr. Spencer respecting the right of the individual to ignore the State, already referred

to, a word of comment from a business point of view is ventured. Mr. Spencer says:

"Government being simply an agent employed in common by a number of individuals to secure to them certain advantages, the very nature of the connection implies that it is for each to say whether he will employ such an agent or not. If any of them determines to ignore this mutual-safety confederation, nothing can be said except that he loses all claim to its good offices, and exposes himself to the danger of maltreatment—a thing that he is quite at liberty to do if he likes. He cannot be coerced into political combination without a breach of the law of equal freedom; he *can* withdraw from it without committing any such breach, and he has therefore the right to withdraw." *Social Statics*, 1865.

To the business sense, the idea of the presence in a nation of any considerable part of its population deriving no benefits from its existence seems as remote from the possibilities of actual life as the suggestion that they could be there without occupying one square inch of its soil or breathing one cubic inch of its atmosphere. Being *in* it, they must be *of* it:—not wholly and entirely, of course, because of their repudiation of any dependence upon it, but still essentially of it by reason of its influence upon them, and their influence upon it. For, from a common-sense business point of view, the existence, within the body of its population, of a noteworthy and steadily-increasing number ignoring the nation, would constitute a menace to the future of that nation of so dangerous a nature that the mere occasional tossing of a dynamite bomb into its legislative assembly would seem a piece of harmless eccentricity, in comparison.

† The classic Political Economy, regarded from the point of view resulting from its theoretical conception of itself as a purely-abstract science dealing exclusively with the natural laws of the production and distribution of wealth, necessarily takes no cognizance of ethical questions of any sort. In its practice as a positive science supplying advice on questions of political policy, the question of including or excluding ethical considerations is of course one to be

settled by and for itself, according to its own views respecting its proper limitations. It is not easy, among discordant data, to ascertain what should be regarded as the position of the science upon this point when dogmatizing positively on practical problems. For while some classic authorities, squaring to this extent their practice with their theory, refuse to mingle Ethics with Economics, there are others—whatever their theory on the subject—of whom this can by no means be affirmed. For example, there is a certain school of American economists who make the ethical aspects of the subject of the regulation of international trade the chief consideration. But whatever may be the want of uniformity among classic economists in respect of their practice in this matter, there is no want of clearness as regards the fruits of their general teaching. It enunciates, unequivocally and unconditionally, the proposition that, in final analysis, all value is created by labor; and it leaves the proposition in this shape, to be employed as the one great, incontestible, premiss of all ethical reasoning upon the relations of Labor and Capital, and with the most deplorable consequences; never giving a sign of anything else than the most complete ignorance of or indifference to the really controlling factor in the entire problem of Distribution, to wit., the distinction between Labor's labor and Capital's labor (see page 439; thus placing their science in the attitude of the incendiary who presents the torch to kindle, but offers no means to quench, a conflagration.

CHAPTER II.

THE PRODUCT OF LABOR.

A leading element in a right understanding of the ethical aspect of the problem of the Distribution of Wealth is a knowledge of the nature of the contribution which Labor makes to the fund which is distributed between it and Capital in the shape of wages and profits, respectively.

It is a subject which calls for the most careful treatment. The momentous character of the results in their bearing upon the relations between Labor and Capital, is enough in itself to suggest caution ; but the ill-success of the classic Political Economy in its attempts to deal with it, gives emphasis to this warning. It is, in fact, a case to give peculiar force to all that has been urged respecting the misleading results of the attempt to treat concrete business questions according to abstract methods. If we have overlooked nothing, the key to the right interpretation of the significance of the phenomena here is to be found in the detection of the fallacy involved in the acceptance of the abstractions "Labor" and "Capital" as properly representative of two different groups of concrete individuals. This, it is to be hoped, will be made plain in the course of the following attempt to work out the answer to the question of the nature of the product of labor.

Inasmuch as the whole question is one of fact let us go to the facts. The following shall furnish our illustration:

At a date comparatively recent, a ton of pig-iron sold in Pittsburg for, say, \$15.00. At that time the item of labor in the manufacturer's estimate of cost was, say, \$1.00 per ton. In other words, the portion of the wealth produced* that was turned over to Labor was about one-fifteenth of the whole ; whereas, if we went to the root of the matter, and traced everything back to its ultimate beginning, it would be found that about fourteen-fifteenths of the whole \$15.00 was created by labor : the remaining fifteenth representing the value of the materials in their native condition. The problem before us, therefore, is to discover the explanation of this apparently anomalous method of apportionment.

In the first place, let us inquire how this one dollar per ton came to be fixed on. It was as follows :

The Blast-Furnace Company's business consisted in assembling at its works all the requisite appliances and materials, and producing pig-iron therefrom. For this business a certain number of working men were required. These were obtained under a contract with each man, according to the nature of the service to be rendered in that case, and the established rate of wages for such service. It turned out that, on a general average, the wages, under the conditions then prevailing, amounted to the sum above stated ; viz., about \$1.00 per ton of pig-iron turned out. Such was the beginning and the end of the direct relations between Capital and Labor in the pig-iron manufacture at the

*For the sake of simplicity, we neglect the distinction between cost and selling price.

Company's Works. But there was behind this a long and complex series of productive acts and operations in which Labor bore a part. The construction of the plant, the supplying of ore, coke, limestone, etc., including their transportation, constituted a great body of correlated industries involving the employment of labor under an endless variety of circumstances, indeed, but all of them reducible, for our purposes, to the one general fact that in all these cases the contractors who supplied the materials and appliances to the Furnace Company settled with Labor themselves on precisely the same principles as those which we have just observed to govern the settlement between the Furnace Company and its own employees; viz., the purchase of the use of their labor on certain terms mutually agreed upon as representing the market prices at that time prevailing.

Now the question arises whether the fact that, abstractly considered, Labor contributed fourteen-fifteenths of the value embodied in the product, supplies any grounds for a claim against the Furnace Company, on the part of Labor for a larger share than one-fifteenth of that value. When the case is presented in this form, business common-sense immediately asks, not *what*, but *who* is meant by "Labor" here. The Labor that contributed fourteen-fifteenths of the value embodied in the materials and appliances assembled at the Furnace Company's Works most assuredly did not contribute it to *that Company*. If it had done so, it would have asked some remuneration for it, and the contractors who did ask pay in a lump for what they supplied, could not have claimed as they by implication did, that they had already extinguished every claim against the articles furnished.

by them. The fact of the business is, that whether we speak of the labor employed by the Furnace Company, or of the labor employed in the production of the things which that Company purchased ready-made, the term "contribution" has no more application to it than it has to the other items of cost in the pig-iron manufacture. The building-contractor, the machinery-manufacturer, the coke-operator, the ore-mining company, etc., etc., "contributed" their several items of supply, and Labor "contributed" the labor. That is to say, the one and the other alike sold what the Company needed for the purposes of its enterprise, receiving the market price for their commodity; and none of them had, nor supposed himself to have, any more claim upon the profits which might be realized on the pig-iron than he conceded to the Company a right to call on him to help make good any losses that it might meet with.

We have thus ascertained the sense in which Labor may be said to contribute to production; but we have not yet arrived at a definite understanding in respect of the question, What is the product of Labor?—What is it, in fact, that Capital purchases from it and applies to production?

Let us revert to the pig-iron manufacture. We see one of the workmen, a "top-filler," taking hold of a laden barrow on the elevator platform, trundling it over to the mouth of the furnace, tipping it over so as to discharge its contents into the hopper, and finally restoring the barrow to its place on the elevator. What is the product of this man's labor? It has impressed upon the contents of that barrow a change which consists in their being now a part of the materials under treatment in the furnace instead of constituting the load

of a vehicle standing out in the open air and consequently incapable of performing the function which gives those materials their value. We visit the engine-room and observe an engine-driver engaged in directing the movements of a blast-engine. At the sound of a signal-bell, he operates the throttle-valve so as to reduce the speed of the engine one revolution per minute. What is the product of this man's labor? For 12 hours in each 24, he controls that engine which, if left to itself, would deliver a fixed volume and pressure of blast, irrespective of the requirements of the work going on in the interior of the furnace, until a change in the steam-pressure or in the resistance, modified its movements, regardless of what those movements should be; and if something went amiss there is no telling what disaster might ensue. This man's labor, therefore, has impressed upon his engine the change from an aimless, dangerous manifestation of energy into a disciplined, systematic, and safe, servitor. And so on, throughout the works. The product of Labor is everywhere seen to be the change which it impresses on the physical object subjected to its action.

It is not worth while to pause here to inquire whether this definition of the product of labor is or is not applicable to labor in all its forms. It appears to describe with sufficient accuracy employees' labor—wages-labor—and that is the only kind that we are now discussing.

If, then, this be accepted as the correct point of view from which to regard Labor's connexion with production, we perceive at once that the analogy between the labor and the other requisites of production runs much closer than we had hitherto conceived.

of. Thus the coal burned under the steam boilers is the agency through which a change is impressed upon the water in the boilers. By its combustion that water is transformed from a non-elastic fluid to a vapor of high expansive power. We see that, in this instance, the labor of the stoker and the coal he works with may both be comprehended in a single category as instrumentalities for effecting changes requisite to the productive action. The principal difference between the two instrumentalities, in their relation to that action is this; namely, that one of them is used only, whereas the other is used up. But however important this distinction may be in connexion with questions of cost, it is plain that it has no bearing upon the question of the connexion of Labor with production according to the wages system.

Let us now sum up the results of our researches.

We find, in the first place, that the conception of Capital and Labor as joint contributors to production, the resultant wealth constituting a fund to be distributed between the partners in the forms of profits and of wages, respectively, is a mere metaphysical abstraction, valueless when not positively misleading, when applied to business questions connected with the distribution of the product: that, in point of fact, Capital contributes everything:—not the appliances and the materials simply, but the labor also: its own labor in the shape of management, and the rest of the labor in the shape of the services of others, which it has made its own by purchase. Thus the labor which has created fourteen-fifteenths of the wealth embodied in the ton of pig iron of our illustration was Capital's labor, not Labor's labor. Furthermore, we perceive that in the general

scheme of our treatment of the subject of Production, with its presentation of Labor and Capital as the two factors in the operation, with all that such a point of view involves, must be taken in a very different sense from that which they convey in the classic Political Economy. All those expressions hitherto employed, which seem to imply assent to the classic view of this subject, must henceforth be regarded simply as a convenient device for carrying the mind of the reader along without broaching too many novelties at a time.

Another point comes out in a strong light. It is one of much practical importance in its application to our inquiry into the principles of Distribution. If the above interpretation of the facts is sound and correct, any grievance which Labor may have against Capital because of inadequate remuneration for its services, must be based upon the claim that it has not a fair chance in the negotiation between them for the fixing of wages. It is plain that any claim of the abstract sort, founded on the fact that "Labor" has accomplished this or provided that, and presented by any individual laborer or group of laborers, is entitled to no more consideration than would be the demand of some individual capitalist or association of capitalists for a share in the dividends of the New York and Brooklyn Bridge Company on the ground that, but for "Capital," the bridge would never have been built. Let us repeat:—Labor's relation to production is precisely the same as that, for example, of the party who supplied to the Blast Furnace Company the fuel burned under that Company's boilers. "Labor" here represents, collectively and

abstractly, the concrete individuals whose services either the Company itself or those who supplied things to that Company, purchased ; and those services consisted simply in impressing changes—each according to the special circumstances of his case—upon the objects submitted to his action. The coal that was shovelled under the boilers was Capital's coal, because Capital had extinguished the previous owner's claim on it, and the labor that shovelled the coal was Capital's labor, for precisely the same reason. The function of the coal was to impress a change upon the water in the boilers, and the function of the labor was to impress a change upon the coal. There is, in short, nothing to differentiate the case of Labor from that of the coal-dealer or the ore-mining company, or any other of the purveyors of supplies to the Furnace Company ; and hence, as above stated, whatever of complaint Labor may have against Capital must be in connexion with the bargain respecting wages—respecting the sale and purchase of the use of the laborer's faculties. It will be found when we come to the study of the principles which control that bargain that this view of Labor's connexion with production simplifies matters greatly, and—what is still more important—removes the element of rancor from the case.

Finally, it has been made manifest that the initiative in productive enterprise must be looked for elsewhere than in any movement originating with Labor.

CHAPTER III.

EVOLUTIONARY HISTORY OF THE INSTITUTIONS WHICH CONTROL DISTRIBUTION.

With the insight into the facts which the preliminary investigations pursued in the previous two Chapters have given us, we should now be in a position to obtain systematic views of the institutions, whether of Custom or Legislation, which regulate Distribution, as they exist to-day. This done, we can reason intelligently as to which should be preserved intact; which modified, and how; and which abolished altogether. For this purpose we begin with a study of their evolutionary history.

We discover two prevailing types of social and industrial organization emerging from the misty twilight of pre-historic times; namely, *The Tribe* and *The Asiatic Despotism*.

The Tribe. We learn from observation of the lower types of savage life still surviving, that the motor-force of productive action developed within the individual would never suffice, of itself, to overcome the inborn animal inertia further than to insure the satisfaction of wants of the lowest type of animalism. A force from without must be superadded in order that the march of improvement based on the satisfaction of higher and higher wants shall be taken up and prosecuted. This additional external force is supplied, in certain meas-

ure, by the tribal form of social organization, which receives this feature from the family organization, of which it is an outgrowth. The patriarch, whether as head of the family or chief of the tribe, enforces upon all capable of performing it, some description of productive work. The outcome of this practice is, in the best instances, a community exhibiting a degree of Comfort and a development of Character which commands our respect. The most striking results are those which relate to character. The spirit of reverent obedience to the recognized head, and of unselfish, spontaneous, devotion to the common good which this social system develops in so marked a degree, are among the noblest elements of character, and to these influences are added those of the nomadic life, a necessary feature of the independent tribal system, and at once the effect and the cause of a passionate devotion to freedom. But its fatal defect as a sufficient basis of an indefinitely-developing progress is manifested in its permanently-arrested advance in productive-power. The tribe must be nomadic that it be preserved from the domination of stronger social organizations, to be described presently; and the nomadic life involves conditions fatal to the development of productive capacity beyond certain narrow limits.

The Asiatic Despotism. The outgrowth from the tribe, to which we have referred, is that aggregation of a number of tribes under some leader of exceptional force of character, who welds them into a single body large enough to assume the character of a nation. Under such conditions, the element of migration being eliminated, the barrier to the progressive development of industrial life is removed, and the next step in indus-

trial evolution is taken. And what a step it is ! It signifies the birth of an industrial system to which is due all that has been achieved of human progress beyond the best examples of the tribal institution. This system is that of Capitalistic Production—the system according to which Capital, for the sake of its own gain, exploits Labor. The Asiatic despotism is one gigantic organized Slavery. The despot stands alone as the representative of freedom of thought and action. Every other individual, and all that he has, are the despot's. Among his subjects are some who have acquired the ownership of others, in order that the use of the faculties of the latter may be at their command. The productive power of the slave is utilized with an intelligence superior to his own, and the obstacle of his natural love of ease counts for little as against his fear of punishment. Although in theory the gains of the master belong to the despot, in practice the master can, as a usual thing, count on keeping them for himself. We have here, therefore, a combination of Capital and Labor in productive effort, Capital supplying management, materials, tools, etc , and taking all risks, and Labor contributing the use of certain human faculties:—each of the contributors having a strong personal interest in the success of the effort:—Capital because of the gain arising from the difference in value between the raw materials operated on and the finished product; and Labor by reason of the immunity from suffering thus secured to himself. But, aside from other considerations, two drawbacks, both of a strictly economic character, necessarily attend this industrial system. The first of these relates to the quality of the contribution of Labor under the conditions which Slavery

either directly imposes or which are involved in its existence as inevitable concomitants thereof. Under these conditions, Capital is strongly interested in the repression of intelligence in Labor beyond a certain narrow limit, and Labor is interested to draw the line of its exertions as close to the line of danger of punishment as it well may. The second drawback relates to that question which we have found to be so vital to production, Demand. The labor-class, under Slavery—especially in hot countries—has so limited a range of wants to be supplied, that an equal number of beasts of burden would call for almost as much. A comparison between the amount of manufactures demanded by (or, rather, for) the slave population of the southern States of the American Union in 1860, and that by an equal number belonging to the labor-class of the northern States, would exhibit remarkable results to those who had previously given no special thought to the matter.

The Wages System. We shall now, on the wings of the imagination, take a flight long in space and longer in time, from the plains of Shinar to Flanders, from Abraham and Nimrod to Jan the cloth-weaver; from a period antedating the records of Egypt and Assyria to the closing years of the Middle Ages. The history of the intermediate period contributes little respecting the progress of man's command over nature, save the lesson how fearfully slow, to our impatient aspirations, have been the steps of economic development; how long and weary the progress of the race toward economic truths. But at last we have come upon a new state of things, developed under the favoring influences of Segregation correlated with Association.

Here within the shelter of walls of stone and gates of oak, with hearts of oak behind them, the burgher gilds preserve their industries unswamped by the tide of feudal barbarism that surges about them. We stand, invisible but observant, within one of these home workshops. We see the master, now weighing the wool he buys, now measuring out the cloth he sells; now instructing an apprentice, anon criticising the work of a journeyman. All belong to this one domestic establishment, all indeed are, in a large degree, members of one family. The master, once a journeyman himself, has, by thrift and tact and self-restraint, risen step by step, until now he commands the services of these employees. With the apprentices there is a barter of sustenance and training on the one side, for labor on the other. The journeymen—whether too young as yet to have had the opportunity to achieve results such as the master enjoys, or, by reason of some defect of character, not competent to buy and sell, nor rich enough to own looms and stocks of materials—had they been born and trained in the East, would have been able to collect a few sticks and a trifle of yarn, and thus work independently for a daily pittance. But Flanders is not Persia or India, and their opportunities are better. They have not the means to buy and run looms and transact a mercantile business, but they can use the looms of others for their own profit: of others who can make better use of their looms thus than by running them themselves. Thus Capital and Labor unite in productive effort, on principles which, in the abstract, are identical. Capital, for the sake of gain to itself, exploits Labor: Labor, for the sake of gain to itself, exploits Capital. Here is an institution—the

wages system—firm based as the rock-ribbed hills. It is founded upon the surest reliance known to human experience—self-interest. But it has other features less severe; features that preach a glad evangel. The scene we have witnessed proves that there *are* circumstances under which mutual good-feeling, mutual helpfulness, between employer and employed, can exist undisturbed, from generation to generation. The fact of an impending giant wrong, the knowledge that this auspicious era of accord in sentiment and in interest between Labor and Capital is to obtain in but a restricted area for but a comparatively brief period, may cast their dark shadows over the scene, but may we not, in spite of all this, indulge for a passing moment a thrill of hope such as must have stirred the pulses of Columbus as he watched the Sargasso weed come drifting by out of the West, and saw the shore-birds wheeling overhead? The end may be far other than we have dreamed, but our quest can not now be wholly in vain. With such auguries, total failure of useful discovery is not for us.

Before we leave the subject, let us repeat in brief the results of our evolutionary researches thus far :

We have seen, then, how the family and the tribe have infused new energy into productive effort by supplying a motive thereto from without, through the influence of the patriarch. Here is production actuated by the pressure of the government upon the individual: the primitive step in the organization of industry. Next in order comes the despotism, which introduces the feature of Slavery* :—production actuated by the

* Introduces it, that is to say, as a distinct economic factor. It is of course not intended to assert that Slavery had no exist-

pressure of individual on individual:—the pressure of despotic Capital on abject Labor. Weary centuries pass, and at last, under the favoring shelter of the free Burgh, a new organization of industry appears, bringing with it “the promise and potency” of unending progress, in its combination of cumulative command of man over nature with corresponding diminution of the command of man over his fellow man. To the economist it recommends itself because of its permanence through its connexion with the most energetic and abiding form of selfishness:—each party is availing himself of something that does not belong to him. It commands the approval of the moralist and the humanitarian because this acquisition on the part of each signifies benefit, not loss, to the other. Each gives to the other something of more value to that other than what the other gives in exchange for it. Each party, therefore, is benefited, while the nation and the race derive the benefits of an increase of productive power. But, great as is the value of this third step, it falls short of realizing the grand desideratum, to wit., production upon a scale adequate to provide the means for that degree of comfort, that standard of living, which is as necessary for the proper development of Character as a moderate temperature to the evolution of organic existence. There must yet be superadded to the wages-system the great-scale machinery, or factory, system.

Here we come upon one of those occasional striking examples of that truth which we first noticed in an

ence until the system of despotic government on a national scale was introduced. Doubtless there was Slavery as soon as there was Captivity, and there was Captivity as soon as there was war;—and that was early in the history of the race.

early stage of this inquiry, namely, that in the pursuance of the economic philosophy of the concrete, the only consistent feature is its inconsistency; the only continuous regularity is its irregularity. Notwithstanding all its promise and potency for the future, the history of the early beginnings of the engrafting of the factory-system on an industrial organization according to the principles of capitalistic production, had aspects as sad, as discouraging, as any of the examples of human greed and human depravity that the annals of Slavery exhibit. Let us transfer from real life a few pictures by way of illustration.

Here is the first in order. It is the year of grace, 1815: place, the interior of a cotton-factory in Lancashire, England: time of day, four o'clock, P. M. Upon a plank floor, foul with fetid grease and lint of cotton, lies, fast asleep beside its neglected task, the wasted form of a child of eight years of age. It is near the close of the week, and daily since Sunday, according to regular routine, it has worked from 6 in the morning until 8 at night, with three-quarters of an hour at mid-day for rest and the eating of a coarse and scanty meal. Here is another.—We trace back the fuel supplied to this factory, and enter the mine. This is what we come upon. The coal-seam in this case is scant 3 feet in thickness. The motive-power for the pit-wagons would seem hard to supply. Not in the least. The matter is quite simple. A young girl of fifteen, naked save for a single scant, ragged, and grimy, garment, down on hands and knees, tugs at her harness through the chill and inky slush of coal dust, dragging the laden car out and the empty car back. We need not dwell upon these fearful scenes. One comprehensive

thought of all that they imply is sufficient. Let us turn to one less appalling to the senses, yet hardly less sickening, and quite as disheartening. We sit in a gallery of the House of Commons. A bill has been introduced by Sir Robert Peel, contemplating some mitigations of the condition of the children employed in factories. Eloquent and distinguished members, eminent in leadership in the Liberal party, denounce the outrage of interference by Government with the manufacturers who are striving to maintain the trade supremacy of England. Backed by the force of public opinion and the unanimous voice of Economic Science, they have held the fort for three years, and now are working an honorable capitulation by limiting the reform to these provisions, namely : that no child under nine years of age should be employed in factories, and that all under sixteen should work no more than twelve hours per day, exclusive of meals. Yet one picture more, also of a sitting of the House of Commons ; the bill before it this time being Lord Ashley's Ten-Hour Act, finally passed, after a seven-years' struggle, in 1847. The Hon. John Bright, philanthropist and express champion of "liberal" ideas, thunders his indignant remonstrance against the legislation that would shorten the hours of the blighted child upon the factory floor and take the body-and-soul begrimed girl from the coal-pit. England's supremacy would be irretrievably lost if a half-farthing were added to the cost of an ell of broadcloth.*

But all this time there was incubating a force destined to put a new aspect upon the prospects of humanity. This was the institution of the Trades

* See "Wealth and Progress," by George Gunton, N. Y., 1887, Part III., Chapters VI. and VII.

Unions. Enough has already been presented with reference to this subject (see especially p. 414, *supra*) to render it needless to dwell upon it here, further than to give more attention than it has thus far received from us, to the question whether the influences—of which the Trades Unions are the most conspicuous—making for the enhancement of the price of labor, have as yet become sufficiently effective to establish a permanent tendency to improvement as regards the condition of the labor-class.

This question in the more familiar form, "Are the poor becoming poorer, the rich richer?" has had a singular experience. The literature of the classic Political Economy affords no direct information respecting it. This is all regular and consistent, according to its theory of itself as an abstract science, and as it has not in this instance—as it has in so many others—entered the realm of the concrete to give advice concerning it, the Scientific and the Christian socialistic bodies have helped themselves to an assumption on the subject which has worked so satisfactorily that it would seem not to have occurred to them to inquire as to its foundation in fact:—suggesting the spectacle of a navigator sailing his ship without concerning himself whether he is steering East or West,—toward his destination or away from it. A single hour spent in common-sense investigation of sources of accurate information readily accessible would settle everything beyond a peradventure. No rational being could resist the evidence, rationally weighed.* The *embarras de richesses* of the facts of everyday life bearing this witness

*Consult, for example, Chapter VIII. of Mr. Gunton's work cited above.

is as great as in the case of the question of the limitation of production by capital. It is especially surprising that an issue of such magnitude should not have been brought to a decisive conclusion by the opponents the Socialists—Christian or un-Christian—for these latter have simply assumed the correctness of their pessimistic and misleading doctrine, and then called attention to certain features of the social life of to-day as though the existence of these facts was, in itself, any evidence that there were not any number of others of contrary significance.

This ready acceptance of the erroneous assumption has been explained by some by the alleged fact that, at the present day, the contrast between the most squalid destitution and the most superfluous riches is brought out more palpably, more glaringly, than in former times. But this is not true. The contrast between the refection of *Terrapine à la Trenton*, at the Patriarch's Ball in New York this season, and the supper of stale and second-hand crusts and slop coffee dealt out by the "sweater" to his victims in the slums is no greater than that between the Earl served with venison pasty on a silver platter by a page in velvet, on bended knee, and Gurth the swineherd munching his hunk of black bread, half rye meal, half pounded bark. The difference between the contrast of the earlier, and that of the later, times lies in this, that whereas, in Gurth's day, it was accounted perfectly natural and according to the eternal fitness of things that those of noble lineage should fare sumptuously in purple and fine linen while the base-born churl was thankful to have husks enough wherewith to fill his plebeian maw; in these practical days when blue blood

counts for nothing, the stock-watering orphan-impoverisher lapped in luxurious ease furnishes an exasperating contrast to the able and willing workingman, turned adrift by the bankruptcy of his employer, tramping the city over in search of work, hungry himself and sickened at the thought how hungry by that time must be his little ones at home. It is the point of view that has shifted, making a state of things incomparably better look blacker by far than a state of things incomparably worse. No account is taken of the vast body of well-to-do, intelligent, progressive, self-respecting, and aspiring, members of the labor-class which the existing social and industrial institutions have made what they are, and whose counterpart had no existence in the best of the old times save in the restricted area of the burgher-gilds or in the scattered shops of the home-handicraftsman. Thus it comes about that the entire significance of the movement of the modern industrial nations, upward and onward with continually accelerated speed, is lost to those who sort their facts to suit their humor.

CHAPTER IV.

THE RELATION OF CAPITAL TO PRODUCTION ; OF LABOR TO DISTRIBUTION.

We now take up the study of such of the phenomena connected with the working of the existing industrial arrangements as can yield us information relating to the remuneration of Capital and of Labor, respectively.

I.—THE REMUNERATION OF CAPITAL.

We open this discussion with a brief history of an expedition from San Francisco, to recover a large quantity of silver lost by shipwreck at a point on the Mexican coast where the surf made the work extremely hazardous. Two different attempts had been made, but the difficulties were such that the enterprise was abandoned in each case, after securing little of value. The owner of a coasting vessel plying between San Francisco and Acapulco, finding business so dull that he was about to discharge his crew and lie up in port until better times, and being personally familiar with the circumstances of the previous abortive attempts, looked up and secured two experienced divers, got aboard all the requisites, and set out to make the third attempt. His bargain with the divers was, that he was to provide everything, and they were to do the submarine work. Owing to the extraordinary risk involved, he

was obliged to agree to give them one-third of whatever silver was recovered. The work accomplished, our adventurer sailed into San Francisco harbor with \$300,000 in good silver ingots. The next day, he paid off all hands thus:—To the divers he turned over \$100,000, and to his crew their regular wages. After reckoning up his outlay he found himself with \$190,000 “to the good.”

Let us now take an inventory of the economic results from our point of view.

1. How stand affected the interests of the nation? Certain of its individual members have—and, consequently, it has—realized accessions to their resources to the extent of \$300,000. As an offset to this credit there is a debit of whatever may represent the impairment of resources due to the use of the craft, diving-tackle, etc.:—a comparatively trifling amount.

2. How were the claims of Labor met? The skilled labor received the covenanted sum for its services. The vessel's crew received their regular pay for their regular work. It never occurred to any of them to demand a share of the recovered treasure. In the recovery of it they had neither “art nor part.” All that the wrecking-enterprise signified to them was continued employment during that period, instead of being cast adrift when employment was scarce and sailors plenty.

But the great significant fact that towers above the rest of the phenomena like Fuji Yama in a Japanese landscape is this, namely, that, of the remuneration of the Capital in the case, not one dollar, not one one cent, came out of the pocket of Labor. Every stiver, not simply of the remuneration of the capitalist, but of everyone concerned, came out of the wealth rescued

from the sea, and that was the creation of Capital and its concomitant, management:—"Creation" in the strictest sense of the word: something out of nothing—from the point of view of business economics.

Let us make quite sure of our ground here, for it involves surprising consequences. Let us exhaust every device for detecting the Something Overlooked, if such there be. We will try if we can gain any new insight by stating the case in a different way.

In this rare and exceptional case, then, the practical outcome is precisely the same as if the nation had made with the treasure-seeker, the following contract in advance.

The nation loquitur :

"1. If you put at risk any part of my resources, it must be a part owned by yourself, so that, in undertaking and prosecuting the work, you will exercise the care with which men guard their own possessions.

"2. If you succeed, I will see to it that what you obtain you shall have for your own, subject, of course, like the rest of your property, to any obligations you may incur in securing it."

Now observe how good a bargain—for itself—the nation here makes with the Capitalist, to wit :

1. The latter puts at risk nothing but his own.

2. All that the nation pays him is taken out of the new wealth which he has created.

3. After paying it, the nation is just as rich as if it paid him nothing:—in this sense, that is, that its resources are not impaired by the fact of the ownership being in him. The new increment in wealth is in the nation's pocket when it is in his, and in the pockets of those whom he hired to help him.

As regards the bargain between Capital and Labor, we can discover nothing that is not already covered by the original Statement. (See page 445, *supra*.)

We have now exhausted our resources of investigation, and must of necessity conclude that, in this peculiar instance of the treasure-hunt, we have found a productive operation in which the only factor in the creation of the opportunity for the acquisition of the wealth* obtained was Capital, and every result produced was beneficent both to the nation and to Labor.

Now what will you say when you discover that this case—so far as relates to the question in hand, the question of the relation of Capital to Production—is neither exceptional nor peculiar, but, on the contrary, is, in every essential particular, a thoroughly representative model, type, exemplar, and paradigm of normal, ordinary, Capitalistic Production. At first blush, this statement appears incredible. Can it be possible that that feature of the case which seems to be especially peculiar to it, namely, Capital, in the rôle of Jason, adventuring forth upon a perilous enterprize and returning with a body of new wealth, out of which Labor receives the price of its services, and the nation a new increment of wealth; Labor counting for no more than any other of the numerous instrumentalities necessary to the work:—can it be possible that this is equally true of every case of the investment of wealth and management in productive enterprise; the really peculiar feature of the treasure-seeking case being the wholly-immaterial fact that the silver in this instance was not then for the first time won from nature, but re-

* The nation's part in such creation does not enter into the present discussion.

claimed after having been snatched back by her? Not only is it possible, but it can be made evident by an appeal to the plainest facts of everyday experience, as follows:

We begin with an example in which the conditions ordinarily attendant on the undertaking of new industrial enterprises are modified, as in the case of the treasure-seeking adventure, by the extraordinary risk involved. We take our illustration from the history of the invention and development of the Bessemer process in steel manufacture.

The premium offered in this case was not in the form of a lost treasure. It was a treasure known to exist: it was known that nature held it in reserve for him who should fulfil the conditions on which she proffered it. There existed a form of iron, known to the trade as pig-metal, readily produced in any quantity required, and at a moderate cost. There existed also another form of iron, called steel, suitable for many uses to which the pig was not adapted; the cost of which was some ten times that of the cruder metal. Now the pig would be converted into steel if it could be made to part with the greater part of the carbon contained in it; and this carbon could be burned out, if air could be brought into contact with it while the pig was at a temperature that would liquify it. The few hundreds of thousands of dollars of silver at the bottom of the ocean was but the merest trifle compared with the treasure that would be his who should put the air into contact with each particle of molten pig. Mr. Bessemer conceived the idea of blowing a blast of air through a body of liquid metal confined in a vessel with a perforated bottom. With the financial aid of an associate with a

will as indomitable as his own, he struggled for years with the chemical and mechanical difficulties of the undertaking, until at last success was achieved and he became the recipient of an enormous income. We have here, then, a case in the strictest sense representative of the process by which productive industries are established in the face of discouragements so great as to repel, as in the treasure-adventure, everyone but the single pair who at last regarded the ratio between risk and premium as a satisfactory one. It may possibly be objected that the fact of the premium being in the shape of the grant of a patent-monopoly makes the case a special one, differentiating it from all cases of hazardous industrial enterprise which lack that element. But this point is not well taken. The feature of the patent-monopoly is not material. Whenever a risky enterprise in a new field is undertaken, it is because of some advantage anticipated by virtue of the repellent character of the undertaking in the eyes of more cautious investors; and it is plain that it is a matter of indifference how it comes to pass that there exists an extra inducement, so long as the fact of its existence is indisputable. We have, then, in this instance, a case from which we can reason as combining in itself every essential feature of what we will call extra-hazardous enterprise in production as we find it in actual life. Wherein, then, does it differ from the case of the treasure-seeking adventure in which we have discovered so admirable an adjustment of the interests of the Nation, of Capital, and of Labor?

i. Once more we ask, How stand affected the interests of the nation? When Mr. Bessemer began his experiments on the invention in question, railway

rails of iron could not be produced for \$40 per ton. At present (1894), rails of Bessemer steel are manufactured at a cost of less than \$20. The steel rail outlasts the iron rail, ten to one.* In units of rail service, therefore, Mr. Bessemer has given his countrymen a gain in respect of the ratios of cost to utility, of twenty to one. The great wealth which he acquired through the success of his perilous venture, consequently, is but a microscopic share of that which he created.

2. How stand affected the interests of Labor? Precisely as in the original case, the only significance of the movement lies in the enlargement of the opportunities of employment. As to any special sacrifices made by Labor in connection with the case, any contribution, aid, furtherance, or support, there is no sign of it, any more than before. [Notice should perhaps be taken of the possible suggestion that Mr. Bessemer's exercise of his faculties must be accounted a contribution on the part of Labor. But it is easy to show that this is not the case: that the category to which it belongs is that of the labor which is included in our definition of Capital—the labor which, as a general thing, can be indicated by the term "Management," and which might be called "Capital-labor" to distinguish it as labor performed by individuals included in "Capital," from "Capital's labor," to wit., labor which has been purchased by Capital from Labor.] Labor sold its services to Mr. Bessemer at the market price for each variety, severally, of service rendered. Of all the great sum realized by him and his associate, not

* The most extensive and systematic observations—those of the French government—make the ratio eleven to one.

one half-penny came to them otherwise than as a commission paid to them on the new wealth which they had put the trade in the way of producing.

We need not enter into the same details as before respecting the bargain which the nation made with the enterpriser in this case. Turning back to p. , we can compare the two bargains, item by item. The result is not difficult of detection. The essence of the matter is this, that, so far as we have yet investigated—that is, so far as concerns the extra-hazardous enterprizes of every sort, kind, and description—the principles that control them are the same as those which govern the treasure-winning case: the relations of Capital to Production, of Labor to Distribution, revealed in that instance stand equally good for all these. It simply remains, therefore, to inquire whether the presence of the element of extraordinary risk is or is not a factor in the matter. For this purpose we will take the Bessemer process as it exists to-day, and inquire respecting the motives which induce any capitalist to embark in the manufacture of steel according to that method; now that, through experience, it has become a thoroughly-established and well-understood industry, involving no element of the extra-hazardous. This is not a difficult matter. The fact that all extra risk has been eliminated from the industry makes it attractive to that class of capitalists who prefer to accept smaller profits with smaller risks. The very men who would not have touched the business when the inducement offered was, let us say, one thousand per cent. per annum on the investment, are willing now to take stock in a Bessemer Steel Company on the expectation of ten per cent. per annum. The history of the process shows—and that of

every other industry starting with extra risk and eventuating in its establishment on the ordinary basis, as to risk, shows the same thing—that the industry passed through a series of experiences suggesting an auction in which the bid for an investor is made at such a ratio of chance of gain to chance of loss as catches the most adventurous. It is the lowest premium that will secure the making of the attempt. Then, as the business becomes better understood, and risk declines, another class of bidders is obtained: natural law, by a process of self-regulation, keeping the ratio between the premium offered and the risk incurred, as near to an ideal correspondence as the limitations of human wisdom will permit. But at no stage of the movement from extra risk to ordinary risk do we discern anything to differentiate any of the industrial enterprizes which make up the great productive operations of modern society under the Capitalistic system—be the risk what it may and the consequent reward of success what it may—from the enterprize of the treasure-seeker, in respect of the relations between the Nation and Capital, and between Capital and Labor.

Looking back over the whole field, we find the analogy between the treasure-seeking case and that of the ordinary industries so complete that, by the use of terms somewhat more general, both can be correctly described in the same language, thus:—In both, Capital organizes everything, provides everything, risks everything. Under the conditions provided by the nation, Capital is the Wealth-Creator.* The negative results already arrived at in respect of the relation of Labor to

* We neglect the case in which Labor is its own employer. We are reasoning of capitalistic production exclusively.

Production are now supplemented and the symmetry of the conception rounded out by the positive results of this inquiry into the relation of Capital to Production. This revelation seems to place us in the position of one who, while puzzling over a cryptogram, suddenly comes upon the key. The suggestion of a comprehensive theory of the relation of Capital to Production, and of Labor to Distribution, flashes upon us like a gleam of lightning illuminating for the bewildered traveller the path to his destination. Let us formulate each limb of this theory in definite terms, and see how each squares with the facts.

The factors in Production are the nation and Capital ; and of these the more important is the nation. To it Capital owes both the environment which supplies all the requisite physical conditions, and the psychic conditions in the capitalist and the laborer which meet the requirements of the situation. Under the operation of natural economic laws, the capitalist, exploiting the opportunities created for him by the nation, adventures in pursuit of wealth for himself ; with the result of realizing for the nation a much larger measure of wealth, as a rule, than accrues to himself. As between Labor and Capital in respect of their several claims as sources—aside from the part played by the nation—of wealth-creation, we see that Capital alone appears in that rôle. As already concluded upon other grounds, Labor has no more participation in the organization and management of the productive enterprise than the coal-formation that supplies the fuel, or the teams that haul it. This being settled, the next point in the hypothesis is to determine the extent of the gains of Capital :—what is the proportion of these to the total

wealth accruing to the nation. The mischievous influences of the generally-accepted view of this subject compel our surrender to it of the space which its intricate nature makes necessary.

In the case of the sunken treasure, the gains of Capital are in much larger ratio to the investment than is usual in the general run of productive enterprises. We observe that the capitalist here netted \$190,000 as against the nation's \$300,000, subject to some trifling deductions. Now in the ordinary routine of business, the vessel-owner would, in ordinary times, in the ordinary pursuit of his trading between San Francisco and Acapulco, have realized in the same time as was spent on the wrecking expedition, and on, practically, the same expenditure, say, \$2,000. How then explain this phenomenon of a difference of nearly 10 to 1, as between the gains of Capital on two several occasions, the amount of the investment and the duration of the period being substantially the same in both cases. To answer this question we must ascertain what it was that fixed the amount of the gain at \$190,000 in one case, and at \$2,000 in the other.

The coasting-trade between the two Pacific ports was a long-established and well-understood industry. Had the profits of our treasure-seeking skipper been decidedly greater, on an average, than those realized by a like investment in other industries substantially similar to it as regards their requirements other than respecting the Capital required, the inducement to compete for those extra gains would have created a competition certain to reduce them to the average level or below it, and would, in the long run, keep them but little above or below it. It was under the working of

this natural economic law that the gains came to be about \$2,000. In the case of the wrecking enterprise, instead of the moderate and readily-estimated risks of the coasting trade, there was a risk whose limits could only be conjectured. All that was certainly known was, (1) that the silver was lying in the wild surf of a shelving Pacific shore, and (2) that the two previous efforts for its recovery had resulted in loss of life and a balance of expenditures over receipts. The situation, therefore, may be described as a standing offer to the public of an uncertain premium for accomplishing a feat of an uncertain degree of riskiness. This offer remained open for a long time before a customer was found. What was required in the customer was a certain adventurous recklessness of temperament, and a certain conjuncture of circumstances in his affairs. The fact that, although there were plenty of adventurous people fully informed of the facts, and plenty of capital ready to embark in any specially-inviting investment, no one was found to undertake the wrecking enterprise until the circumstances surrounding this skipper and the qualities of his mental make-up combined to induce him to take up the offer, is sufficient evidence that the premium offered was the very lowest that would bring about the performance of the productive act. The underlying principles, then, of these phenomena are as follows:—The profits of Capital in long-established and well-understood industries are determined, normally, by competition; the rate being that which a complex of conditions created by the circumstances belonging to the time and place determines; the apparently-inordinate profits of Capital in certain industries being due to the extra risk involved;

the extra profit being simply a risk-premium which natural economic law maintains at the lowest rate consistent with securing the undertaking of the enterprise.

Let us now see if we can ascertain what this ordinary risk-premium is, in concrete, positive figures.

The joint-stock manufacturing companies of New England have averaged dividends of about six per cent. per annum during an extended period. The returns from large agricultural estates in Pennsylvania, cultivated by the proprietor with hired help, or rented "on shares," have been, on a like long average, from three and a half to four per cent. per annum, on their value. It is plain that these are not exceptional cases, limited to their respective regions: for if it were so, the emigration of Capital therefrom would long since have made the fact evident. Yet even these profits, moderate as they are, include a risk-premium. The returns realized by Capital in Holland long since, and in the leading industrial nations of the world, including the United States in the last few years, show investments to a vast amount on which the returns do not exceed two and one-half per cent. per annum. These investments are in securities which—so far as human foresight can go—may be regarded as without risk. It would seem, therefore, that, as far as these localities may be taken as representative, there obtains in agricultural industry conducted on "capitalistic" methods, a risk-premium of from one to one and one-half per cent., and in joint-stock manufacturing industry a risk-premium of, say, three and one-half per cent. per annum. The sum of it is, that in modern industrial communities, the working of existing institutions gives a premium of about two and one-half per cent. per annum for the

creation of Capital, and for the investment of capital after it has been accumulated, one and a half to three and a half per cent. per annum for risking it in the long-established and well understood industries : while for all extra-hazardous investments, according to this standard, the extra-risk premium is as low as natural law—the law of human motive—will permit.

Viewed in every possible light, there is but one testimony of the facts, namely, that no other arrangement could be devised by which to obtain the services of Capital in production on terms more advantageous than these—even these reasonable commissions (which include the recompense of the personal services of the capitalist, when such are rendered) being paid out of the new wealth produced—whether we regard the matter from the point of view of the interests of the nation as an association for the creation of wealth or as a body of consumers.*

* We must appropriate a modicum of space here to the singular position of the American classic economists in their treatment of that law of the gravitation of capital to the most profitable investment, upon which the automatic regulation of the risk-premium depends. These philosophers concede the fact that new industries can be, and have been, introduced by legislation which made them extra-profitable, but scout at the idea—when not ignoring it altogether—that the perfectly-unconscionable profits which they declare to be accruing to the capital invested in protected industries must inevitably draw additional capital into those industries until they cease to offer extra inducements. The demonstration of the fact that the risk at the time of the introduction of these industries was very much greater than would be the risk of embarking in them now, places these scientists in the position of conceding that water will flow down a certain incline, but will refuse to move down a much steeper one.

II. THE REMUNERATION OF LABOR.

Having thus attained clear conceptions of the relations of Capital to Production, as revealed to us by the new light, it now devolves upon us, in order to round out our hypothesis, to take up the inquiry respecting the relation of Labor to Distribution.

No sooner do we begin to arrange the phenomena in order than we perceive that the satisfaction which we have derived from the inquiry into the facts respecting the remuneration of Capital, is not to be repeated in the study of the facts connected with the remuneration of Labor. We have already learned to regard the prosperity of the labor-class as the paramount desideratum for every class:—as the end to be sought for, first of all, because the basis of all else that is desirable. When, therefore, we discover that in the best types of modern civilization there exists, not merely a distressed and depressed class, but also a large part of the population whose lives would be brightened greatly by the command of larger means and an increase in their hours of leisure, we comprehend that no subject of inquiry possesses greater interest for us than that of the actual facts of this matter and the most judicious action on the part of the nation for bringing about a better condition of things.

It is needless to go through the details of the process by which we arrive at the conclusion that the existing rate of wealth-production—even if the product were distributed on principles of ideal perfection—falls far short of the requirements of a society such as we aim to create. The first thing in order, therefore, is to ascertain how to increase the per capita production of

the nation. It is equally manifest that the methods of apportioning the wealth so that the desired share of what is produced shall reach Labor, must be carefully looked after.

The first of these problems has been the subject of our researches thus far to so great an extent that we should be prepared to supply a prompt solution. By directing the Demand of a nation upon its own industries, two results are secured ; viz., (1) the great bulk of its supplies are obtained at minimum cost ; and (2) its productive capacity is rapidly developed. We therefore pass to the second problem, to wit., the means of securing the devolution upon Labor of a large part of the wealth produced. The phenomena here are not difficult of interpretation. It is manifest that the objectionable features of Distribution as it is at present shaped by the existing social and industrial institutions, are due to the principle of Competition:—Competition among employers, each one striving to get his wages-expenditure down to the lowest possible figure : competition among the wage-workers, each striving to secure the employment of which there is not enough for all: these are the evils that reduce the influence of Labor in what Adam Smith expressively calls “the higgling” between the employer and the employed, over the wages question.

The solution, therefore, seems easy enough:—abolish competition. But when we come to work out the details of this programme, difficulties present themselves. The institutions under which has been affected the march of improvement from savagery to the highest types of civilization are so saturated, as it were, with the principle of Competition that to eradicate it there-

from is a thing impossible. There is no alternative. To abolish competition, we must abolish *them*. But in view of what we have learned of them as the instrumentalities through which, as we have just said, all the progress of the race has been effected, thus far, the scheme which involves their abandonment seems too hazardous to be seriously discussed until every other expedient has been exhausted. What we have to look for, therefore, is a method of avoiding the evils of

- competition without disturbing it in respect of its beneficent effects. Whether any such method is feasible depends on the answer to another question, viz., Are the evils which flow from competition due to a principle in that system as ineradicable as is the competition-principle itself in the existing institutions; or are these evils the results of causes not inherent in that principle, but, on the contrary, so far external, adventitious, as to be capable of removal without surgery fatal, or dangerous, to the patient?

Once that we have brought this inquiry to this shape, we find the answer ready to our hand. If we can indeed be assured that the measures we have pointed out are adequate to provide opportunities of employment for all willing and able to embrace them, their adoption for the purpose of increasing wealth-creation will, by the natural operation of economic law, at the same time, convert Competition from an enemy of Labor to an ally. When the employers compete for the services of the employees, the monster of the frightful mien will be transformed into a principle not merely to be endured, but embraced with fervor. When the employees have a choice among different chances of employment, the hardship of having to bargain when

they must take the offer made or starve, while the other party knows where to suit himself if he does not do it with them, will vanish.* †

* The sound business sense of this method of enabling Labor to assert itself in bargaining with Capital for the price of its services can be appreciated if we compare it with the proposal of Christian Socialism that the individual employer should exercise generosity toward his employees and pay them a rate of wages dictated by a brotherly spirit. Observe the things overlooked here:

1. This plan is unscientific because inconsistent with natural law. Human progress is not based on the insecure foundation of a willingness to be content with less than the social and industrial arrangements of the period and the locality accord. It is founded on sound, energetic, always-consistent, ever-present, greed; and this because the race always has been, is now, and for long to come will be, controlled by greed. *There* is a motor-force to be depended on. That individual action which is in harmony with the great social movements of its time is the only one that can, in the long run, accomplish anything. Make it the employer's interest to bid high for the services of his employee, and you establish things on a business basis.

2. The elevation of Labor is not to be furthered by placing it in the attitude of dependence on the good-will of its employer. Whatever is done, any project that involves the danger of impairing the self-respect and self-dependence of the employee must be rejected without further consideration.

3. When an employer engaged in the manufacture of any staple article undertakes to pay higher wages than prevail in that business, his action is thoroughly uneconomic, unscientific, and harmful to the cause he seeks to aid. To this general proposition there is one exception. If by this course he enables the workmen in that trade to establish his schedule as that of the trade at large, it is all right. Otherwise he does but furnish an object-lesson inculcating the unwisdom of applying to an order of things based on competition,—and hence involving the principle of the survival of the best-managed business enterprises—

The discovery with which this Chapter opens,—especially in connexion with a certain point in the empirical theory of the cost of production—is of a character to provoke serious thought. Is it indeed the

a practice which is discordant with that order, and by reason of that discordance, tending to bring the disgrace of failure upon a most praiseworthy effort.

There are special cases to which these remarks do not apply. For example, where the industry is of such a nature that a difference in the personal qualities of the workman will make so great a difference in the value of his work as to constitute a tangible margin of profit to the employer who secures him instead of an average workman, the employer zealous of good works to the cause of Labor can, with every warrant of scientific business economics, pay the superior workman every penny of this margin. There is nothing in this to give an advantage to the utterly self-seeking competitor who pays the going wages to the going sort of workmen; but whenever he goes beyond that line, he is paying a premium to the extortionate employer whose constant study it is to get his work done as cheaply as possible; he is, *tanto quanto*, energizing a force which tends to exhibit, through his inferior power of competition, the folly of mixing sentiment with business, and of depending on the virtue of the intention to atone for the vice of the proceeding.

This truth is illustrated by those instances in which the employer seeks to develop a higher intelligence in his employees by surrounding them with the means of enjoyment and of improvement available to them without trenching on their wages. The Willimantic Thread Company, for example, [See *Old World Questions and New World Answers*, by Daniel Pidgeon, F. G. S.] has spent a considerable sum in providing for their workpeople such agreeable and elevating surroundings as afford to those capable of appreciating their opportunities, the means of a brighter existence and a more alert intellect than the employees of any of their competitors have at command. These expenditures have been made and are continued on the

fact, then, that our civilization is so advanced in one direction that we have positive knowledge of the existence of such familiar terrestrial substances as nitrogen, hydrogen, etc., in stellar bodies so distant that a generation of men is born, flourishes, withers and dies

ground that the difference in the quality of the work makes them a profitable investment from a purely business point of view. Now, suppose that the officers of this company carried this policy to excess. Suppose that they spent in this way more than was compatible with the money-interests of the concern, and a decrease in the dividends as compared with those of their less progressive competitors gave grounds for complaint from its stockholders and of triumph to the enemies of progress: would not such an act of generosity be rightly regarded as a calamity to the interests of Labor? Yet this is precisely what would be done should the company undertake to pay higher wages than its rivals.

† The absence of the Law of Rent from this inquiry into the principles of Distribution is to be explained upon grounds somewhat different from those by which we justified our omission of the Law of Diminishing Returns from Agriculture. In that case it will be remembered, we excluded that cardinal principle of the classic system for the reason, among others, that, even if true, it would have no bearing upon questions of practical action. In the present instance, on the contrary, were the classic law of Rent an actual operative force in the economics of modern society, it would concern the business department of economic science in a high degree. But such is not the case. There are no phenomena discoverable in real life that can be traced back to this law as the cause of which they are effects. When we regard all questions relating to the subject of Rent as being simply special parts of the more comprehensive subject of the investment of capital, we find all the phenomena of the case which concern our business science, however complex when superficially considered, to range themselves in order according to their easily-discoverable underlying causes.

while a vibration of light is travelling from one of them to the earth ; and, in another direction, so crude, belated, barbarous, that our most cultured philosophers hold that the earnings of a nation's Capital and Labor signify to it so much of expenditure ; and some of the most enlightened and conscientious among us regard the employer of Labor as a licensed robber, fattening upon what should be the wages of those who create the wealth he appropriates ? Is it not plain that if the human intellect has, under the conditions of its existing stage of development, been able to acquire so much knowledge in one direction, and so little in another, there must be something radically wrong in our methods of seeking knowledge in that department of thought in which our deficiencies are so lamentable ?

Again, no question can be more full of interest to the systematic inquirer than that of the comparison of the part of the path of progress which humanity has travelled, up to the present time, with the part thereof which remains to be traversed. It would seem impossible, in view of the facts, to avoid the conclusion that the world—so far as the Western Civilization controls it—is governed with so little wisdom that we must regard our evolutionary movement as lying much more largely before us than behind.

These are grave questions, but this is not the place to pursue them further.

CHAPTER V.

SOCIALISM.

We have now completed what may be called the positive side of our inquiries respecting the Distribution of Wealth. We have examined into the ethical principles which should control the adjustment; into the facts which constitute the true basis of the claims of Labor; into the evolution of the social and industrial arrangements from which results the distribution actually in practice in the Western Civilization of the present period; and have essayed a new interpretation of the significance of the phenomena of Capitalistic Production in their bearing upon the questions, (1) of the relation of Capital to Production, and (2) of the relation of Labor to Distribution.

Casting now a comprehensive glance over the field thus traversed, we find the following propositions to have been empirically established; that is to say, as working hypotheses, to be accepted and acted upon as positive truths so long as human experience supplies no phenomena inconsistent therewith:

As regards Production,

1. That the existing industrial arrangements are already yielding a vast body of wealth, and give promise of rapidly increasing this yield.
2. That these results are obtained, notwithstanding the fact that the operation of the natural laws on

which this success is based, is greatly hampered and disturbed by reason of the ignorant and unsystematic manner in which the support of the nation is applied.

3. That the knowledge supplied through empirical research will enable the nation to introduce order and system into the regulation of its economic legislation, thus supplying the conditions for the free play of the natural laws of cumulative increase of returns.

As regards Distribution,

1. That, so far as natural law is concerned, the recompense of Capital is adjusted upon principles of the most perfect equity. That it could not have been better done, so far as relates to the interests of Labor, if Labor had enjoyed the privilege of having a preternaturally-gifted advocate present at the framing of these principles, and every suggestion of his had been adopted.

2. That, while the share of Capital is not excessive, but, on the contrary, the lowest that will secure the performance of its functions, the remuneration of Labor is very much beneath the standard requisite for the highest good of the individuals composing the Labor-class, and of the Nation of which they constitute a part; and for the utmost possible promotion of the progress of the Race.

3. That the required increment in the compensation of Labor must come from the consumer-class:—in other words, from the nation at large.

4. That the means for such outlay can be secured by the systematization of production, as already indicated.

From the above point of view, the prescript of practical action is easily formulated, as follows:—Obtain positive experience of the working of the existing social

and industrial institutions, under systematic regulation before casting about for something better.

We are now prepared to take up the negative side of this field of research, devoting ourselves to the analysis of those propositions which contemplate the substitution of a different body of political and economic adjustments. The one controlling concept in all of these is the condemnation of Capitalistic Production in its existing form, and the only proposition worth our attention is that which would simply modify this institution to the extent of having Capital represented by the State,—employing more or less the intermediary functions of the Municipality—as the agent of the social organization. The system based on this proposition will be recognized under the comprehensive title of Socialism. It is this proposed substitute, therefore, that we are now to investigate; testing each of its fundamental data in turn, and, after rejecting those which fail to endure our scrutiny in the light which the neo-empirical method enables us to throw upon it, to observe the shape in which this leaves the system.

The adherents of Socialism may be divided into three classes, as follows:—By far the larger number,—in fact, the only class formidable in point of numbers—are those who have become Socialists from practical, rather than from theoretical, considerations. They find their condition unsatisfactory, and they are told by those better informed than themselves, that this irksome state of affairs is due to the fact that the capitalistic class, their employers, have artfully contrived a system supported by law which enables them to appropriate to themselves a large part of the wealth rightfully belonging to their employees, by virtue of the fact that it has

been created entirely by them. Finding in their own experience the verification of so much of the teachings of their Socialist advisers as relates to the meagreness of the compensation of Labor under the existing industrial system, they take it for granted that the rest must be equally well-founded, and base their hopes of better things, not on any measures for increasing the aggregate of wealth produced, but upon new adjustments which shall secure to Labor that part of the wealth now produced that is appropriated to itself by Capital. The other two classes are swayed by theoretical, rather than by practical, considerations in their advocacy of socialistic doctrines. The first of these, to wit., the Scientific Socialists, looking upon the existence of Poverty—including in the term every degree of deprivation of the means of Comfort and Character—as the great predominant problem of modern society, and at the same time regarding as unquestionable the doctrines of the classic Political Economy in relation to the claims of Labor as the sole and only creator of wealth, repudiate its *laissez-faire* conclusions, and, carrying out those doctrines to their logical results, trace the cause of poverty to the absorption by Capital of a large part of the earnings of Labor, and see no possible remedy other than the abolition of Capitalistic production according to the individualistic system, substituting therefor that of collectivism. The second variety of the theoretical or systematic Socialists—the “Christian” or “Nationalist,”—assuming the correctness of the theoretical position of the Scientific branch, finds its impelling motive, not so much in the desire for a truly-scientific social and industrial adjustment, as in intense sympathy with the wrongs of Labor and hot indigna-

tion against its grasping and unprincipled oppressor, Capital.

It is hard to say which of these three is the most dangerous to human progress :—the Working Socialists (and the parasites that prey upon them), because of their numbers and their ignorance ; the Scientific Socialists, because of the earnestness of their convictions and their knowledge—dangerous in inverse ratio to its quantity and quality ; or the Christian and affiliated Socialists, by reason of the purity of their motives and their zeal of humanity, which is not a zeal according to knowledge, other than that of their Scientific brethren.

There is but one way of dealing with the first of these, namely, to reduce the inflammation by removing the irritating cause. When, through a systematic exploitation of the Demand of the nation, Labor finds at its command a choice among opportunities of employment, the thrifty working man will have no time for, or incitement to, discussions respecting the encroachments of that capitalist class of which he is daily himself becoming more and more distinctly a member.

As regards the second and the third classes, when we cut the scientific basis from under the first-named of the two, we necessarily leave the other in the same plight. It is to this work, therefore, that we now address ourselves.

The initial question, namely, What is the scientific basis of Socialism ? is rendered extremely simple for us by the circumstance that it is set forth in systematic form in a single work, the *Capital* of Marx. Concentrating our attention, therefore, upon this exposition,

and with a view to the application of our empirical touchstone, the question of the Something Overlooked, we inquire respecting the data of Marx's reasoning, and find them to be as follows,—employing the language of Empiricism instead of that of the author; that is to say, sketching the state of things necessarily implied by the description which Marx gives of the evolution of capitalistic profit.

The present organization of Capitalistic Production whereby Capital is enabled to rob Labor of a part of the wealth which it creates, is a development out of an antecedent organization, in which the capitalist purchased the raw materials, the machinery and appliances, and the labor-power, and supplied the management gratis. The product was therefore, in all legitimacy, the capitalist's own; he having paid the market price for everything obtained from others:—the "market price" being established by the natural laws of value. Thus far, then, Labor had its rights. But, after an indefinite lapse of time, longer or shorter, but long enough to have established the institution of capitalistic production on a footing of completeness and permanence sufficient to render feasible the plan of action on the part of the capitalist which is now to be described, the capitalist makes the, to him, astonishing discovery that there is nothing left over for himself. The value of the product and the sum of his expenditures are the same.

Upon this, the capitalist sets himself to work to devise some way of overreaching his workmen. Observing that they work but six hours of the twenty-four, and that the wages which they earn in this time suffices for their maintenance, he hits upon the plan of

causing them to work for twelve hours per day instead of six, and this without any inducement to them. The workshop is now fitted up with all the appliances necessary for the doubling of the hours of work. The new system goes into operation without trouble—no allusion is made to the possibility of objection on the part of the employees—and the capitalist quietly pockets the wages which they thus, for reasons into which the historian of these events does not enter, complacently omit to ask of him.

Such is the empirical interpretation of Marx's account of the origin of capitalistic profits. Of those who object that this is not the way in which he states it, we would ask that they point out a feature in the above that is not an absolutely-inevitable implication of what he does say:—in other words, if he did not say this, should he not have?

Plainly, the thing overlooked by Marx was the fact, not only that such a thing as the evolution of a system of capitalistic production under a state of things in which Capital had no inducement to embark in productive enterprise has never been witnessed in the course of human history, but also that such a thing—the laws of human motive and human action being what they are—is impossible to absurdity. The same thing precisely is to be said of the equally-preposterous feature of Labor quietly acquiescing in the duplication of its services without mooting the question of additional pay.

If now we revise Marx's system, introducing the corrections made necessary by the inclusion of these neglected facts, what will there be left of it? Still, there are those who can never be convinced finally

without an *a priori* verification, and out of respect for these we supplement our own remarks with the admirable argument of Mr. George Gunton, in his Paper, *The Economic Basis of Socialism*, in the *Political Science Quarterly*, Vol. IV., No. 4. Our limited space confines us to the briefest possible *résumé* of a single one of the several aspects in which he considers the subject, as follows :

Marx illustrates the natural law of economic value by the case of the manufacture of 10 lbs. of cotton yarn, which he analyses thus :—Cost of raw cotton, 10s.; of maintenance of machinery and appliances, 2s.; of labor, 3s.: total 15s. (In the case of the cotton and the machinery, the cost is determined by the quantity of labor expended on them. The cost of the labor is determined by the amount of it required for the production of a given quantity of gold. Marx assumes that the cost of maintaining a laborer and his family for twenty-four hours, and the production of three shillings in gold, stand for the same expenditure of labor: hence three shillings represent the full economic value of a day's labor.) In the period, then, of equitable adjustment prior to the fraud of the capitalist, the value of the 10 lbs. of cotton yarn was 15s.; all of which was absorbed in providing materials, appliances, and labor, and the capitalist realized no profit. Then the fraud is perpetrated, the laborers work 12 hours instead of 6, and produce 20 lbs. of cotton yarn at a cost of—cotton, 20 lbs., 20s.; machinery, 4s.; labor, 3s. = 27s. But if 10 lbs. of yarn are worth 15s., 20 lbs. will be worth 30s.; consequently, though the capitalist spends but 27s. his product is worth 3s. more:—3s. of “surplus value” have been created, which the capi-

talist appropriates. Such is Marx's explanation of "the trick."

But the trick is Marx's, not the capitalist's. It lies in his method of determining the value of the product in the second instance. All that we have to do is to ascertain the value of the 20 lbs. of yarn as Marx ascertains the value of the 10 lbs., and the juggle stands exposed.

"Why was the value of the 10 lbs. just 15s.? Because, Marx explains at great length—'15s. was spent in the open market upon the constituent elements of the product, or (what amounts to the same thing) upon the factors of the labor process.' He explicitly tells us that the only reason why the capitalist could not get 16s. or 17s. for his yarn was that only 15s. had been consumed in its production." Applying this law to the case of the 20 lbs. of yarn, the total value of the product is 27s. "Oh no!" exclaims Marx; that would give no surplus value. The *cost* of the yarn in this case, he admits, is only 27s., but he insists that its *value* is 30s. According to Marx, then, his economic law of value works thus: 10s. + 2s. + 3s. cost = 15s. value; while 20s. + 4s. + 3s. cost = 30s. value. In other words, 15s. = 15s., but 27s. = 30s. * * To assume that, while a cost of 15s. can not yield a value of more than 15s., a cost of 27s. can yield a value of 30s., is to violate alike the laws of logic and the rules of arithmetic; and this self-contradiction destroys the whole basis of his theory. * * A theory according to which 15s. value = 15s. cost, while 30s. value = 27s. cost, needs only to be stripped of its metaphysical garment and once seen in its simplicity in order to be rejected as unworthy a place in the literature of any science."

Aside from these fatal objections, there remains another which of itself would be sufficient to condemn the entire Socialist programme, as follows:—That programme assumes the presence in human nature of qualities which do not exist there; or, rather, speaking with greater precision, assumes the preponderance of certain qualities which, on the contrary, are overborne by others of an opposite tendency. The kind of Selfishness that can be depended on to control men in ordinary matters of business is the one to build on in forecasting their probable action under any scheme of social or industrial readjustment that human wisdom can devise. This proposition can not rationally be disputed. But the business experience of every civilized community, from the Exchanges of the great centres of the world's commerce to the petty transactions of the remotest, most unsophisticated, hamlet, supplies us with evidence unlimited in extent, indisputable in significance, that it is selfishness of the lowest type with which we shall have to reckon. Mark well and thoroughly digest this fact; then, keeping it steadily in mind, pass in successive review before you each several feature of the Socialistic prospectus, rejecting such as are inconsistent with the undisputed sway, in the community concerned, of motives of the most sordid character, and note what a beggarly show the remnants will present. As well might one attempt to build a second Washington Monument upon a base of sun-dried clay.

Nor need we confine ourselves to this *à priori* reasoning,—direct as are the conclusions and impregnable the data: our empirical system points out a case in human experience directly in the line of the subject

in hand. The phenomenon of that cancerous growth, The Ring, on municipal administration, affords a completely worked-out illustration and object-lesson. The tyranny of such a master is shown in a thousand ways. To specify one, take the case of the Tammany ring of the City of New York and the saloon-keepers, as exposed by the Senate Investigating Committee of 1894. The manner in which every detail of the business of every one of those many thousands was watched and reported on, and political allegiance enforced, shows what that kind of organization can effect, even under the comparatively-adverse conditions there prevailing. Observe that all this formidable combination, securing wealth, not only to every prominent leader, but to every important underling, and holding in a bondage as complete as though it had been a legalized institution, all that came within its power, was able to maintain an existence for a long period, and may at any time renew its hold, notwithstanding the fact that the utmost extent of its sphere of influence is confined to much less than one-half the voting population, and that the basis of its power, to-wit., the public means of which it has the handling, consisting of the emoluments of the offices which it controls, the expenditures in contracts, etc., supplemented by black-mail and other forms of extortion,—that all this, enormous as it seems, is but the merest trifle compared to the resources which would be placed at the command of a Combination which handled all the working capital and the management of the collective industry of a nation—the purchases and the sales, the wages and the wage-workers, the vast standing army of office-holders. Was ever such an act of midsummer madness proposed

as the making of such an experiment, the withdrawal from which would be hopeless in direct proportion to the intolerable nature of its evils:—the chances for relief from the oppression inevitably and necessarily declining with the increase in its severity?

From our empirical point of view, therefore, Scientific Socialism is simply absurd as regards its conception of the genesis of the individualist-capitalistic production, utterly and barefacedly illogical in its explanation of the emoluments accruing to Capital, and reckless to the borders of insanity in its programme of practical action.

We turn now to the case of the *soi-disant* "Christian" or "Nationalist"—or, according to our classification, "Emotional"—Socialism. Here is an authentic statement of its fundamental assumption:

"The cause of poverty * * is the loss of wages.
* * The failure to pay a man what he has earned.
* * The man who is robbed, and robbed daily, is not in a condition of mind suitable for the sowing of good thoughts. * * Perfect distribution would render unto him all that he has produced—fifty, sixty, perhaps seventy, per cent. of the product—in place of a beggarly eighteen per cent.:—a hard subsistence.
* * Labor practically says, "Ah well! I'll take eighteen per cent. of my product, if I can: if not, why, I'll take what I can get, though I produce it all with my own hand and brain. * * The shoe-hand, producing a hundred dollars' worth of shoes, must content himself with but eighteen dollars." *The Dawn* (Nationalist organ,) No. 2, pp. 1, 2.

This fails, of course, with the wreck of the Scientific

system whence it is derived, and, if the emotional socialist were primarily controlled by reason, we might close this line of discussion at this point: but, unfortunately, the impressions produced by sentiment are not often effaced.—perhaps not often essentially weakened—by appeals addressed solely to the intellect; and it seems necessary in the present instance, that we should supplement what we have set forth in the way of argument with some suggestions in the nature of remonstrance.

We ask, then, of our Socialist friends of this class that, for the moment, they assume with us, provisionally at least, the invalidation of their scientific basis, and allow us to exhibit themselves to themselves as they appear from that point of view. We promise to show them—under the altered circumstances, of course, of the absence of a scientific backing—as deriving their convictions either from the anarchist beer-hall, the kindergarten, or the lunatic-asylum.

Taking up the first of these, we would call their attention to the tendency they have shown to a most regrettable leniency toward—we might almost say, indulgent sympathy with—the least reputable of their co-workers for the new social era: to their tenderness toward actual crime, whether committed or recommended, in the interest of that cause. Let us illustrate the point by an extreme case as follows:

On the third page of the fourth issue of *The Dawn*, under the heading of "Anarchist and Nationalist," there appears this communication:

"I think there is at least a poetical connexion between the apparent smothering of Socialist principles in the judicial murder of the so-called Anarchists and the recent outbreak of the

same principles purified, in the great Nationalist movement. I enclose these lines :

“Chicago boasts it slew a vulture ; cries,
‘Lo, error quenched !’ but from those ashes born,
See Boston’s broad-winged golden eagle rise,
Triumphant as the morn.”

Never a word of editorial protest then, nor from a reader thereafter ! Let us look a little into this matter. “Judicial murder ?” The laws of the State of Illinois declare that any person inciting others to commit a crime does *thereby* make himself a responsible participant, an active principal, in the offense, should it be afterwards committed. It is not necessary, mark you, to establish any other or further connexion between the inciting party and the act. Now does this legislation constitute judicial murder ? Are you, gentlemen of the “Nationalist” faith, disposed to find fault with the law which puts this kind of responsibility on the instigator to crime ? If so, pray define your position : if not, wherein lies the judicial murdering of the so-called Anarchists on a certain so-called day, in the so-called jail in Chicago ? Do you mean to say that the Court should not have correctly expounded the law, nor the jury rightly applied it, nor the sheriff faithfully executed it ? Or do you maintain that the men thus condemned and executed had not advised the use of bombs against the police ? If you do, then we respond that the men never were executed : that there never were such men : that there is no such place as Chicago ; and our position is as rational as yours. Human evidence is worthless, and law a sham, if these men were not proven to have done this.

Now, under the conditions prevailing at the date

when this public utterance was made, it could not have escaped the notice of most of you who counted for much in the way of influence and responsibility, yet you sanctioned by your silence this declaration of one who saw in the conspiracy of the outlaws at Chicago a movement substantially the same as your own. "The same principles purified." The man who can entertain such a conception of the facts must be either too much of a mollycoddle to realize what ruthless, blood-smeared, brutal, murder is, or he must be constitutionally in sympathy with it:—he is either an ass or an assassin. When, then, you thus permitted yourselves to appear as the endorsers, either of idiocy in reasoning or insensibility to the plainest dictates of humanity, of morality, of decency, did you not afford some grounds for the accusation that you had been sitting, willing neophytes, at the feet of the sodden apostle of universal beer and benevolence, while he condemned the capitalistic tyrant to remorseless slaughter?

But our space is dwindling, and we must pass on. Imagine, if you please, a party of those gentlemen, for example, who conduct the inner mysteries of a municipal Ring, with cigar in mouth and feet on the table, discussing "the slate" for an approaching election. One of the number, to mitigate the severity of their labors in the public interest, reads to them the following extract:

"As to their ability,"—the reference is to the higher officials in the Nationalist community—"to have risen from the ranks, by tests so various and so severe, to their positions, is proof in itself of extraordinary qualities, while, as to faithfulness, our social system leaves them absolutely without any other motive than that of winning the esteem of their fellow-citizens. Corruption is impossible in a society in which there is neither

poverty to be bribed nor wealth to bribe, while as to demagoguery or intrigue for office, the conditions of promotion render this out of the question." (*Looking Backward*, p. 192.)

"Bless their innocent little hearts!" would be the admiring comment.

With such examples as this of your knowledge of the world which you have set out to reform, can you find anything to resent in the suggestion that your inspiration in the framing of your political fabric must have had its source in the pure atmosphere of the academic shades dedicated to the unfolding of the budding infantile intellect?

But a different origin must be assigned to such recondite interpretations of the significance of the phenomena of real life as that presented below:

"For not only were these four thousand establishments not working in concert, and for that reason alone operating at prodigious disadvantage, but, as if this did not involve a sufficiently-disastrous loss of power, they were using their utmost skill to frustrate one another's effort, praying by night and working by day for the destruction of one another's enterprises.

"The roar and rattle of wheels and hammers resounding from every side was not the hum of a peaceful industry, but the clangor of swords wielded by foemen. These mills and shops were so many forts, each under its own flag, its guns trained on the mills and shops about it, and its sappers busy below, undermining them." (*Idem*, p. 317.)

The rhetoric here suffices in itself utterly to explode the hypothesis which would make this the product of an asylum for the feeble-minded. The energy of its tone and its daring flights of the imagination mark it as an emanation from the seclusion into which the interests of a workaday and unimaginative public are

wont to thrust those fervid spirits who disdain the cramping limitations of sanity.

But there are bounds to the excuses for levity, no matter how great the provocation. Absurd things have often their serious side:—a truth than which nothing could be more pertinent in the present instance. Before leaving this branch of our subject, however, one point calls for mention,—but in all soberness—as follows :

Referring to what has been said above respecting the unfitness of human character in its present state of development for the strain which the programme of Socialism would put upon it, a brief series of questions addressed to the body of Emotional Socialists will perhaps set that matter in a clearer light than anything else that could be proposed. The question of the fitness of human nature as it is, is a question of the character of its Selfishness. What then can we learn as to this, from the source indicated ? We ask of them, “ You have undertaken to give advice to a vast body of your fellow-citizens who must necessarily receive with some degree of confidence the disinterested counsel of those whom they respect as especially eminent for their intellectual gifts, blameless lives, and philanthropic impulses. The subject of your advice is of the highest moment to them. It involves the risk of precipitation into a bondage that would take every gleam of happiness out of life for them and theirs. A vital factor in the case is a right decision of the question, What is the tendency under existing conditions ; are the rich becoming richer, the poor poorer, or the converse : is Capital gaining a stronger control of Labor, or Labor acquiring a greater control of Capital ? The

materials for the conclusive settlement of this question are at the command of men of your intelligence to such a degree that three hours in a good library, under competent guidance, will amply suffice. Now, have you ever,—any of you who stand to your principles—devoted to such systematic inquiry, three hours, one hour, half an hour? Most assuredly, most positively, you have not! We are able—we are compelled—to speak thus confidently because we have the proof before us. Men of your intelligence could not enter upon such an inquiry without discovering, at the very outset, enough to compel men of your integrity to follow it up; and to follow it up would eventuate in the total revisal of your social theories. Finally, as the last of our premisses, you cannot impugn the proposition that if there is one body in the community in which we may the most confidently look for evidences of altruistic sentiment, it is your own. Now, with these indisputable data before us, is it not an inevitable conclusion therefrom that the fact of such an example of the working of human motive, conscious or unconscious, as is involved in this indifference to the fate of those whom you ask to be guided by you, proven by the fact of your being so little alive to their interests as to remain unaware how little heed you give to the responsibilities of your self-assumed position;—is it not as certain as certain can be that when such a thing can happen with *you*, the general body of society can not be relied upon to exhibit a practical altruism adequate for the Socialistic programme?

Casting, now, a comprehensive glance over both the Scientific and the Emotional forms of Socialism, we recognize more clearly than ever the soundness of the position taken at the outset of our labors, namely,

that the errors of both were alike traceable to their source in the erroneous teaching of the classic Political Economy. From the empirical point of view, therefore, the facts of the case may be thus presented :

The adherents of each of these forms, owing to their eminence, intellectually and morally, have a responsibility toward society which they must, in the future as in the past, recognize and act upon. If, then, our empirical diagnosis of that economic system is correct, their line of action is clearly prescribed for them. Their first duty is to join in the pursuit of the errors of that system, running them down, one after another, until the whole shall be thoroughly invalidated, not only in the minds of the pioneers of thought, but in public opinion at large ; so that the last vestige of their influence shall be eradicated, and the way cleared for the reception of the simple, common-sense, principles drawn from the every-day experience of ordinary life :—principles which, although arrived at through a strictly-scientific method of investigation, appeal to the business sense of the least-cultured portion of the community. In this way, both will be able, while finding grounds for a keener pleasure in their work, to make amends to society for their share in the dissemination of the evil influences prevailing under the classic régime, and to cause future generations to rise up and call them blessed :—blessed as peacemakers in that realm of thought and action wherein, however unwittingly, they erst had been as madmen casting firebrands, arrows, and death.

We have now reached the close of our Theory of Wealth ; but so intimately is the subject associated

with the Theory of Character that it will be well to postpone, with one exception, the revision of the results arrived at, until we shall have in like manner closed our investigations relating to the latter subject.

The single exception referred to, is the question of the bearing of the knowledge which has been developed, upon our Chief Hypothesis,—the Want-Theory of Human Progress. Let us therefore direct our attention to this subject.

What we seek is a sound Working Hypothesis of Progress. The prime requisite for such is that it shall endure the test which is regarded as the touchstone of the completeness of each physical science; namely, its ability accurately to forecast the future. Were there such a thing as a science of meteorology which enabled its prosecutors to announce beforehand all the mutations of the weather during a prolonged period, the confidence in the authority of that system would increase day by day as fresh evidence was added, until it would be complete, unquestioning. Next in conclusiveness to this, practically, absolute demonstration, is the evidence drawn from the completeness of the explanation given of each phenomenon of past or present experience by pointing out its place in the scheme of nature hypothetically presented: the cumulative proof derived from the invariable success with which each succeeding difficulty is cleared up, constantly becoming more and more satisfying. It is with this latter form of demonstration that our empirical philosophy undertakes to deal, formulating the fundamental principal that, whenever our horizon is wide enough to include the leading phenomena of human experience in respect of any subject, the hypothesis which is competent to range all

these in a common generalization, as a theory of the scheme of nature in the case, must, under the laws of man's psychological constitution, be accepted and acted on as a sound working hypothesis, so long as it fails not to subject to its organizing power every related fact of human experience.

Now, let the reader deliberately consider the extent of our late researches among the phenomena of the economic experience of the race:—the absolutely-innumerable details that are grouped under any one of the many different phases of that experience which we have had under observation,—the phases of production, of consumption, of exchanging, of partition—and couple therewith the fact that our most earnest scrutiny has failed to bring to light one single instance of inconsistency with our anticipatory suggestion, and he must be convinced that sufficient evidence has been adduced to establish the authority of our Theory of Human Progress as a sound Working Hypothesis, to be received and acted on as such, so long as no phenomenon irreconcilable therewith emerges to bring it into question.

BOOK FOURTH.

Theory of Character.

If our reasoning, up to this point, is without a serious flaw, a little reflection must convince us that we have reached an extraordinary position. We stand where never a one among all the generations of men has stood before. We have, in one great department of human knowledge, reached an insight into nature's ways—into the order and constitution of the universe—never attained till now. For look:—we hold the key to the Problem of Poverty. It remains simply that the public opinion of some one advanced modern nation shall be made to comprehend the principle of the solution,—a matter easily within the scope of its intelligence—and the thing is done. With an intelligent and systematic legislative regulation of international trade, giving free play within the jurisdiction of the nation to the natural laws of wealth-generation, every economic question that now perplexes the statesman or the philanthropist will assume a new aspect. The assured employment of every willing hand and brain will supply the physical basis for the cure of every ill that poverty has created. Take pause to gain a realizing sense of the significance of all this. The thought is confusing; we seem to stand in the presence of an event beyond our grasp. Can it be possible, we

ask ourselves, that such a sunburst of good-fortune should suddenly irradiate the path of humanity?

But with our second thoughts come sobering suggestions. What profits it that the heritage be great if the heir is unworthy? What avails the Environment, if the Self be wanting? There is material here for anxious reflection.

Consider, for example, the part in the scheme of character-building that is assigned to Discipline; the body-and-soul-destroying effect of having things come too easily; the slackening of the moral fibre that follows the continued acceptance of things unearned; the dangers that attend the habit of finding satisfaction in the lessened call for strenuous endeavor. Observe how many there are to whom those exacting conditions of success in life which prove too much for the powers of the great mass of those born dependent on their own resources, are but bracing stimuli, but means of development. Truly there are two sides to the question of the provision of new opportunities for the struggling.

Is it not inevitable, indeed, that to a society as to the individual must come that disquieting, if not absolutely disheartening, experience of which we observe so many examples wherever the modern unrest is driving the community along in headlong pursuit of wealth? Do we not all know the couple who,—starting out in life with youth and love and hope for sole capital, have lived laborious lives of self-denying thrift, patiently laying the foundation upon which at last a sudden and surprising structure of wealth rears itself—who, under these circumstances, enter upon their new existence with all the enthusiasm of achievement

crowning long endeavor, only to discover, as experience lengthens, a greater and greater bewilderment that the anticipated delights appear not; that the things that seemed so desirable when they could not be had, lose all their interest when it involves no sacrifice to have them: that the repressed craving for things beyond reach was a source of positive satisfaction in comparison with the unceasing, irrepressible, craving for they know not what? Or if one were to picture a mother, the mistress of a splendid establishment, lost in thought while she contrasts the slender bonds that unite her children, brought up in abundance and never called upon to make one serious sacrifice for one another, with her own boundless devotion to her parents, her brothers and sisters, in the old home on the farm, where the narrow family resources compelled many a surrender of a cherished project; and, with a sudden pang of regret for the present and apprehension for the future, realizing how sad the change, how incalculable the loss, to these petted and envied favorites of fortune—if one were to paint such a picture, how many a grand mansion on the Fifth Avenue or the Back Bay might supply the original!

Such phenomena there are in endless number and variety, and it is profitable to recall the fact of their existence; but our chief concern is with broader and more comprehensive questions. Fixing our attention, then, upon the great body of the population of the most advanced modern nations, it becomes manifest that if it were possible, without demoralizing effects, to supply them with the means of gratifying a range of wants such as would decidedly elevate the existing standard of their comfort, we should place them in a

position to be amenable to influences as decidedly conducive to elevation of character. There remain among a vast majority, in respect of domestic surroundings, of innocent enjoyments, of leisure to be appropriated at will, needs whose calls are too constant and too insistent to permit the recognition of others less clamorous. But observe how much of enjoyment in life, of growth in intellectual and spiritual excellence—due to the realization and satisfaction of a continually-ascending succession of wants—would be opened up to those sufficiently relieved from the pressure of mental anxieties and the compulsory devotion of their faculties to gainful employment.

Consider the resources of man's natural environment, and the meagre extent to which they are availed of: the defects of character involved in the lack of capacity to appreciate the marvellous pictures which crowd nature's gallery:—the wastefulness, the barbarity, the pity of it! The average individual, especially of the agricultural population, passes through his earthly experience like a snipe through a garden of roses, looking only for worms. Equally neglected, too often, are the opportunities for the brightening of existence afforded by the domestic and social relations. It is simply lamentable, the rarity of the spectacle of a pair of married lovers, successfully enduring the strain of the departure of youth; their love keeping them and the world around them (for them) bright and young forever. Yet the loss is self-inflicted. When Care comes in at the door, they let Love fly out at the window. And yet, did each but keep turned toward the other the same side after as before marriage,—the spontaneous courtesy, the partiality that can see no

fault, take no offence ; the constant vigilance against the betrayal of an unworthy impulse, the creation of an unfavorable impression ;—were this the case, that which to most is but as the passing beauty and sweetness of a flower of early spring might be as the perennial bloom and fruitage of the gardens of the Hesperides. And the waste of opportunities in the intercourse between parent and child, between brothers and sisters. It is saddening to dwell upon what is, in contemplation of what might be. The refined and abiding pleasures of friendship,—who is there that is advanced in life that can not recall with regret how little he has made out of the good that might have been his? The satisfactions, the elevating and expanding influences, derivable from acts of public-spirit, of patriotism :—how much of these jewels more precious than rubies are commonly gathered from these inexhaustible mines? Again, there is a companionship not of the sort just spoken of :—one more intimate than even the most intimate of them ; constant, ever present, from which escape there is none, save in unconsciousness. Allusion has already been made to the case of the galley-slave and his mate. Each individual has, much after the same fashion, an inseparable companion—his other self—that he can convert into a source of misery or of satisfaction :—for he has the shaping of him. There is still another form of association, open to all who properly qualify themselves therefor. There is a club which welcomes all, blackballs none ; yet remains the most exclusive, the most distinguished, that the world has ever seen. It is the Gild, Society, Institute, of the great minds of the past, embodied now in their pages, as erst in flesh and blood.

There remains a spiritual intercourse of a yet higher order. Among the qualities which go to constitute elevation of character, one of the foremost is the sentiment of Reverence. The lack of it it is that establishes a common bond between the lowest pithecid wild-beast-man, the tough, the cad, and the fashionable "rounder." It is at once one of the most conservative, and—because one of the most elevating, chastening, and refining—one of the most progressive of the emotions. It comes into being in its crudest form in that stage in the psychic development of the savage when he has acquired intelligence sufficient to enable him to recognize in the more startling of the manifestations of nature, the existence of powers beyond those of himself and his kind. In this primitive form it is fear, pure and simple. As his intellectual and moral development proceeds, and he comes to recognize in himself impulses toward consideration for the sufferings, the wants, the desires, of others, he traces these suggestions of the consciousness to a personality more or less resembling his own, but as much higher, nobler, grander, than he, as the best of these impulses is higher than those which move him under the pressure of more sordid motives. This psychic movement, being founded upon the most stable and deep-seated principles of the human psychic constitution, unless thwarted by disturbing causes, grows with his intellectual and moral growth until the unseen prompter of high thought and noble endeavor takes a form to some extent necessarily anthropomorphic (because otherwise unthinkable), but idealized into the perfection of purity, justice, benevolence, and wisdom, so far as the idealizer is capable of conceiving these qualities; and becomes to those fortunate ones

among the sons of men, a presence as real as their own—a Something, however distinct or indistinct in outline, whose existence is as strongly attested by the testimony of their consciousness as is their own or that of the material world around them. To attain such a mental altitude necessarily implies a development of character in themselves that causes them—without detracting from the reverence with which this internal monitor inspires them—to regard Him as their bosom confidant, to whom they are ever instinctively referring each impulse, as to a supreme and final authority—a Guide, Philosopher, and Friend.

In view of all these facts, it seems impossible that we should remain insensible to the value of that civilization to which the door will be opened when the systematic provision of the means of satisfying the material wants of every class of society has become a realized ideal. Yet this is by no means the whole of the story. This cumulative interaction of Comfort in the physical individual environment, upon the Self, and of the Self on the physical environment, will necessarily be assisted by certain auxiliary influences, as follows :

In the first place, we have not only acquired such knowledge of the natural laws controlling the generation of wealth as enables us to solve the problem of Poverty, but have at the same time obtained such information respecting the character of those laws as qualify us to perceive the error in the classic doctrine of the necessary antagonism of interest as between Capital and Labor, and the injustice of the existing adjustments of the recompense for the services of each of these respectively. The removal of this lamentable

source of rancor, with all its evil influences on the development of Character, is a contribution to the cause of human progress second in importance only to the removal of the necessity for poverty.

Again, the change in conditions which renders the acquisition of a moderate competence a comparatively simple and easy task, will tend to reduce the force of the existing incitements to the absorbing pursuit of gain. Under the prevailing more rigorous and exacting conditions, the implication of superior ability and the consequent distinction and influence which, to the popular apprehension, go with success in wealth-accumulation, constitute, in the eyes of many, a more powerful incentive to money-seeking than the cravings of avarice.* The importance of this consideration will be better appreciated if we call to mind the unreasonable excess to which this form of hero-worship is carried in modern society. The adulation showered upon the successful, the little heed taken of the blind luck or—much more frequently—the ignoble methods through which the results are reached, exhibit the uncertainty of the foundation on which this unpleasant feature of modern society is based, and indicate the likelihood of its reformation.

* This fact affords a ready explanation of that trait in American national character which has proved such a hopeless puzzle to the bulk of critical observers from abroad, namely, the combination of, on the one hand, an intense devotion to money-getting, with, on the other, such liberality in expenditure and such good-natured long-suffering as a public, under all manner of impositions. The main stimulus to such devotion is to be found in the consideration which comes with success in the winning of wealth, rather than in the satisfaction of the hunger of avarice.

It may, furthermore, be confidently expected that, under the changed conditions, some practical recognition will be shown of a certain principle already alluded to in these pages, the general neglect of which has hitherto constituted not the least among the indications that, after all, our vaunted civilization must present to higher Intelligences than the Human the aspect of a very low and primitive development. The principle in question is that of the Law of Diminishing Utility. We have little space here for more than the suggestion of this subject for a place in our inquiry; but it will require but little consideration of the facts to enable us, at least partially, to realize what a long time it has taken us to discover that there is more satisfaction in a moderate meal than in a surfeiting cram; more true delight to the isolated farm-boy in his one book, read by the firelight, than to the ambition-plagued millionaire in his sumptuous library and vast and varied collection; more genuine pleasure to the cottage maiden in her little group of window plants than to the lady of the manor in her acres of conservatory with its towering palms and rare orchids.

Space fails us for the further enumeration of the varied aspects of this subject, of which human experience affords such an abundant supply, as well as for the reflections which they suggest as regards their relation to the more comprehensive theme of the developing influence of Environment on Character, and of Character on Environment. Nor is there call for either. The attentive and judicious reader can surely require no further accumulation of material for the conviction that in the uniform and practically-endless succession of proofs at our command, of provision, as

regards Character, equally with that as regards Wealth, for the successful carrying-out of the natural scheme of human development, we have conclusive evidence of the soundness of our great co-ordinating concept, the Want-Hypothesis of Progress.

BOOK FIFTH.

Summary of the Department of Theory.

Exitus Coronat Opus.

We have now completed the first department of our task as laid down for ourselves at the inception of our labors. Out of a study of the most conspicuous of the related phenomena, we framed, at the outset, a conjectural hypothesis, which we then proceeded to verify; ransacking, to the best of our ability, the stores of human experience; and with the result of establishing, according to the canons of our logical system, the authority of that theory as a sound working hypothesis: thus placing us in a position to enter fully equipped upon the labors of the second department of our undertaking, namely, the working-out of the details of our precepts of practical action.

But here the question arises:—Have we not, while achieving this, accomplished something else,—something of even broader scope, of even deeper significance? Let us see:

After the fashion of an Alpine climber, we have hewed our way, hand-hold and foot-hold, over the treacherous surface, until we seem to have reached a point of view which commands a wider horizon than we had thought to attain. Seeking to acquire systematic conceptions respecting the possibility of human

aid to human progress, we formulated, as just stated, a tentative co-ordinating concept, the Want-Hypothesis, which has proved adequate, not only for bringing order out of chaos and "letting light in among the confused and jarring elements of the world" as presented in the phenomena related to the special subject in hand, giving us the sought-for order and system in our plans of action,—has proved adequate, not only for this, but also for methodizing all knowledge, so that we are, with assured confidence, able to extract from the pages of the great book of human experience, the Tale of all tales, the Story of all stories of wonder or of profitable instruction, **THE TERRESTRIAL STORY OF MAN**. It is a history of a movement not yet completed, of a project yet in process of development; yet so clearly may we trace its phases through all the past, up to its existing status, that these supply material sufficient for the forecasting, in respect of all their essential features, of the remaining phases of its evolution. This, then, is the narrative :

In order to give system and coherence to our recital, we begin with an explanation of the scheme in prosecution of which the successive phenomena described has been evolved:—the knowledge derived from our empirical analysis of those phenomena being sufficiently precise and at the same time comprehensive to enable us to construct a teleological explanation of the facts regarded as an ensemble. This scheme may be presented as follows:

Its purpose is, to take the segregated spheriform body which we call The Earth, pursuing its appointed course through space, and upon its surface to perform, through a process of systematic growth, an act of

creation whereby it shall be transformed into a fair and beautiful garden, with every tree pleasant to the sight and good for food, and every beast of the field and fowl of the air: all this to be the heritage of a race of beings endowed with physical beauty and grace, enjoying in gladness the products of their cheerful and zest-giving labor; their existence brightened by their appreciative interest in the varied aspects of Nature and in the achievements of Art; by the affectionate relations of the domestic circle, the intimacies of friendship and the mutual exchange of good offices and kindly methods in social intercourse; by the satisfactions of a self-respect based on obedience to the behests of duty; by the intellectual delights of familiar intercourse with the great minds of the departed generations; and, last and best of all, by their elevation to the conscious and purposeful co-operation with the Divine Intelligence in the work of fitting themselves for that intimate companionship with the Author of the scheme which constitutes its ultimate aim and object. The manner of the realization of this plan, up to the present phase of its development, may be thus described:

Beginning our history at the first epoch in the evolution of organic life, we note the emergence into visible existence, of the protoplasmic material of the vegetal cell, establishing the presence thenceforth of Life upon the planet. With the evolution of the successively-developed forms thereof, we detect the first suggestions of the Want-Principle as the motor-force of progress, made manifest in the fact that the growth and maintainance of the individual plant are secured by a body of wants impelling it to action—"reflex," "automatic," or however else regarded and designated,

but at all events carried on without consciousness ; the nearest approach to symptoms of conscious, purposeful, activity being found in such instances as those of the root-spongirole accepting the digestible, rejecting the indigestible, constituents of the soil in which it operates, and of the daisy and the dandelion shortening the stalks of their flowers to avoid the shears of the mowing-machine. In this period we find established the physical basis of Life upon the most generous and abounding scale.

The next epoch making event which emerges upon the scene is the presence of Animal Life, bringing with it the feature of conscious being, doing, and suffering, and the exercise of individual will, prompted by conscious preference, in action. This form of existence presents us, in its highest developments, with examples of a notable advance toward the ultimate goal. We observe the evidences of reasoning in the elephant in the execution of complicated operations, whether as a laborer or a performer in the ring. No sympathetic student of dog-nature has failed to observe the mingled sentiments of religious awe and devoted affection with which the canine mind regards its recognized master. But the range of wants, even in this highest order of animal (as distinguished from human) nature, though wide, is confined within definite and impassible limitations. The needs of the individual supply the motives to all the acts which provide for the existence of himself and his race, but they do no more. Those individuals give no indication of an element of progressive development within themselves. In their case, the development-process is carried on solely by the evolution of new types. The hour of a new and

most significant epoch is sounded when a species puts itself in evidence endowed with the all-compelling principle of the Evolution of its Own Wants. Thenceforth the development is cumulative to a degree impossible before. Each forward step supplies the basis of a new one. Thenceforth the Story of Man is that of man himself. It is a complex of endlessly-varying experiences. Here unchanging savagery, there marvelous progress: here civilization confined within narrow boundaries, there embracing vast populations: here remarkable advancement, there stagnation or decadence: wild creatures haunting the sites of ancient seats of empire, of opulence and grandeur, of philosophy and art,—one or other of these endless and bewildering variations of aspect, whether of stagnation, advance, or retrogression, occupying the scene wherever human society has found a foothold, and through a period whose beginning can only be vaguely conjectured, down to the present hour, when the great leading civilization of the East is threatened with destruction by violence from without and disorder within, and that of the West appears to be accumulating in equal measure the power to win the gifts of nature and the tendency toward adventuring on an experiment which may wreck the whole structure.

What, then, does our empirical philosophy gather from all this chaotic mass of contradictory experiences? Two things plainly, to wit., first, conclusive proof of the efficiency of the natural law of the evolution of wants, which, in the face of such hindrances, has developed such examples of power in wealth-generation, such triumphs of intellectual force, such high conceptions of spiritual truths: and, second, equally-incontestible

evidence of the strength of that body of antagonistic influences which have to so large an extent thwarted and still continue to thwart that law. Ranging these hostile forces in a reasoned ensemble, we perceive that all are traceable, more or less directly, to a common source, namely, Ignorance. It is the want of knowledge of better things that makes possible war, despotism, rotting luxury, cynical pessimism, and every other active force in the disturbance of the working of the beneficent Principle of Progress.

Here the question arises, "But if the existence of the law of want-evolution affords evidence in favor of a natural scheme of progress, does not the existence of these antagonizing forces in like manner bear witness to the contrary? That will depend upon the circumstance whether the hostile influences are based upon a natural law as immutable as the law of progress. It requires little research to determine this point. We perceive that, on the contrary, natural law has established in the human constitution, a principle expressly antagonistic to ignorance, and giving every promise, by virtue of its triumphs in the past, of still more signal triumphs in the future. It is now in order for us, therefore, to set forth this episode in the story of human experience, as an essential feature thereof.

The principle just alluded to above, manifests itself in that intellectual craving, that hunger for knowledge, which begins to be felt even when the satisfaction of the physical needs has progressed to but a limited extent, and which thenceforth becomes intensified by indulgence, while, at the same time, each achievement lends fresh power for still further triumphs. Now natural law provides two different methods for the

acquisition of knowledge. The one best adapted to the more primitive steps of human progress is the Finding-Out method, according to which the reasoning goes no farther than the determination by observation and experience of the fact of an apparently-invariable relation of antecedent and consequent, as between phenomena, and the assumption, for the purposes of a working hypothesis, of the conclusion, *post hoc, propter hoc*. Now observe what an aid this method is in action taken for the satisfaction of wants. A single illustration will sufficiently elucidate this point, as follows :

By this method man learns that if he would secure a certain crop of desirable food, he must place the right seed in the right soil and exposure, and properly segregate the artificial growth from the competition of its natural rivals. These conditions being provided, the anticipated result is realized. Now, analyzing this transaction to its abstract elements, we interpret its significance thus :—The husbandman can not create the crop, A, but he *can* create the ensemble of conditions B : which done, A results. Thus, for him, knowledge is power—creative power. He is enabled to cause a crop to be where, but for him, no crop was nor would be. This knowledge he, or others before him, *found out* by the simple observation of phenomena.

The second natural method in the pursuit of knowledge is an outgrowth, through experience, from the first. Or it may be described as a process of digestion applied to the knowledge acquired through the first. Instead of simply accumulating facts, it systematizes them according to their relation with one another or with some preconceived idea, some co-ordinating concept. It generalizes phenomena into princi-

ples. Taking found-out knowledge, it *thinks out* of it new knowledge of a higher intellectual range.*

At this point we come upon the explanation of the persistence, down to the latest hour of the present time, of that body of ignorance which thwarts the progressive forces to the extent which still leaves, as already noted, the most conspicuous examples of advanced and well-ordered modern civilization, a prey to the existing or impending evils which do so grievously afflict or so ominously threaten it. This explanation would seem to be as follows:—We have already learned that progress in knowledge is a work confided to a certain intellectual *corps d'élite*, the Leaders of Thought, the pioneers who blaze the way for the multitude. Now the conceptions of this body during the entire period of human experience, up to a comparatively very recent date, were, as regards the chief concern of humanity, the Philosophy of Human Life, extremely vague and confused, and hence of comparatively small efficiency in the promotion of human progress. The discovery of the great co-ordinating concept of the Law of Evolution therefore constituted another in the succession of great epochs in the history of the race, introducing as it did, an order and system

*That the term "higher" is legitimate here—no matter how much higher, in respect of utility, the found-out knowledge may sometimes be—is plain when we reflect that the more intelligent genera among the animal kingdom possess a large measure of the found-out, or concrete, variety, while the thought-out, or abstract, knowledge is the unique possession of the more advanced among human beings.

It will of course be understood that the distinction here is relative, not absolute. There is always more or less of thinking-out.

into human research which simplified immensely the comprehension of the records of human experience. But with all this there remained a Somewhat Wanting,—a supplementing, completing, additional co-ordinating concept, the active generalizing principle in contemplation of which the chief function of the principle of evolution becomes that of supplying the basis for this new concept. The hypothesis to which our present labors has led us up, is, that in the Law of Progress through the Evolution of Wants we have discovered the missing factor, the active generalizing principle in question. Let us inquire to what extent it seems to meet the requirements of the situation.

No sooner do we grasp the significance of this principle of progress, than an entirely new conception of the relative importance of the different departments of human knowledge reveals itself. We perceive that in Economic Science we are to find at once the code of guiding principles wherfrom to construct a business-like Philosophy of Human Life, and a system of pre-scripts of concrete action for the furtherance alike of Comfort and of Character. But observe what a contrast such a conception presents with the existing condition of things. The great body of the Illuminati, regarding Economic Science as simply one among the several subordinate departments of knowledge, have treated it according to the principle of the Division of Labor, relegating its pursuit to specialists whose report they accept:—life being too short to admit of the general reasoner obtaining otherwise than at second-hand the minute and exact information in each of the different departments of knowledge which a special body of inquirers, concentrating their efforts upon a single one

of these, may be relied upon to acquire. A striking illustration of this truth is found in the case of the Synthetic Philosophy, the express expositor of the evolutionary principle, which, with all its marvelous breadth of scope and intimacy of detail, accepts as ultimate facts the great body of the doctrines of Economic Science as embodied in the system of the classic Political Economy; with the result that, as regards the functions of that which our empirical researches reveal to us as the great instrumentality for bringing the powers of the principle of Association to bear upon the furtherance of progress—to wit., the Nation,—as regards the functions of this prime and paramount instrumentality, the conclusion reached is that its influence should be minimized to the last degree possible: *laissez faire* for the individual, *ne laissez pas faire* for the nation.

Recalling our attention to the general body of the leaders of thought and opinion, we perceive that, under the empirical theory of progress, instead of their universal and invariable attitude toward economic research, they should, as purveyors of knowledge for the statesman and the philanthropist in particular, and for the race in general, make of it the prime and principle object of their study: holding it among their most vital, cardinal, principles that through that study alone can they hope to arrive at the predominant features of a right Philosophy of Human Existence.

Turning now to the case of the specialists to whom was confided the duty of supplying the economic data, we find ourselves back again within sight of our starting point, to wit., the explanation of the persisting Ignorance. Reverting to what we have already learned

concerning the classic political economists, the new light now thrown upon the subject places us in a position to discover this explanation in the fact that these inquirers—by reason of that feature of weakness in their intellectual constitution already discussed in another place (see page 156, *ante*)—found a fatally-deceptive obviousness in the *a priori* conclusion that, as between the lower and the higher methods in the pursuit of knowledge, the higher must necessarily be the one to be employed by them. For while reasoning upon the subject, they kept steadily before their eyes their theoretical assertion that theirs was exclusively an abstract and hypothetical science, whereas, in point of fact, they have, all the time, owed all of their influence upon the thought of the world to their active interference as the especial, authoritative, advisers upon problems of concrete action.* It is to this un-

* There is a striking analogy between the contradictory positions of the classic Political Economy respecting its relation (1) to problems of concrete action, and (2) to its contradictory theories of international exchange. The unconscious but continual shifting in the latter case from the one to the other, as occasion demands, is highly suggestive of its methods when dealing with the nature of its contribution to the problems in question. An interesting illustration of this truth is afforded by Cairnes in his Dublin Lectures on the Logical method of the classic system, wherein, as we have already abundantly seen, he follows up the assertion that "Political Economy stands apart from all particular systems of social or industrial existence. It has nothing to do with *laissez faire* any more than with communism; with freedom of contract anymore than with paternal government," etc., with examples of its triumphs, every one of which relates directly—has, in fact, no pertinence or significance otherwise than with reference—to practical questions of finance or trade.

perceived, unsuspected, inconsistency that we must attribute the circumstance that minds so keen in speculative discussion should have been insensible to the common-sense, business, aspect of their procedure in undertaking to think out their conclusions proclaimed as prescripts of concrete action, without once conceiving the propriety—not to say the imperative necessity—of finding out how the premisses from which they had derived those injunctions for practice, squared with the facts of that realm of the concrete in which their injunctions were to be carried out. Among the consequences involved in this fatal case of the Something Overlooked, was another such, in their neglect of a feature in human experience which, had it been duly observed and its significance rightly interpreted, must have awakened them to a sense of the unsoundness of their methods. The feature alluded to is the existence of a large, conspicuous, and influential, class in every civilized society, namely, the successful business-men, whose methods of arriving at conclusions on problems of concrete action are acquired under circumstances much more favorable to extreme care in their logical operations than those under which they themselves have reached their own decisions; seeing that, as a rule, the business man's conclusions are speedily tested by the actual result, and an error immediately punished by a fine in solid cash, or its equivalent. The consequences of all these errors in method have already been made sufficiently manifest in the course of our investigations.

But their error in the selection of their method was not the sole cause of their shortcomings in their function as specialists:—as purveyors of special informa-

tion. They repeated, in their own case, the mistake committed by the general body of inquirers in delegating to them the special study of economic phenomena; for they further specialized their science by limiting its subject-matter exclusively to the phenomena of Wealth; and this too with the narrowest possible construction of the term. Adam Smith set the example with his definition of "productive" industry; regarding as "unproductive" even the labors of those who originated and imparted knowledge which tended to increase many-fold, the capacity of production in others. Ricardo and his special school crowned the system of divorce from terrestrial humanity, by the invention and exploitation of "the economic man." Under these influences, it became unscientific to entertain any ideal,—in other words, to introduce any suggestions relating to the desirable, the preferable: to have reference to any scheme of development, of progress. Their idea of scientific precision has been of the sort that would prosecute the study of locomotive construction and operation, with the strictest avoidance of reference to the hauling of trains on railways.

Now that we have arrived at the explanation of the persistent survival of so large a measure of ignorance, in spite of the vast and incessant accumulation of instructive data which human experience affords, and the remarkable range and keenness of human inquiry into the reasons of things, it is plain that the thing to be done is to rectify the errors in the mode of procedure, both as regards transferring the science of Economics from the position of a specialty to that of the leading department of the Concrete Science of Progress,

of the science of Sociology, and of the Philosophy of Human Existence ; and as regards the adoption of the business logical method of Finding-Out, systematized by Thinking-Out. Let us imagine this to be done, and the thought of the general body of the pioneers of knowledge to be concentrated upon the problem of human progress :—What forecast can we frame of the result at which they will arrive ?

Extending our survey over the entire field of human experience known to us, we observe two different examples of organic development, which we segregate from the general body, in order to the more systematic study of each. The examples referred to are (1) the Chinese civilization in the Far East, and (2) the European civilization of the West. These afford numerous points of contrast, as follows :

1. Stage of evolution. The Eastern civilization has long since attained its complete development, and since then has presented a condition of repose under an industrial and social adjustment regarded by those subjected to it—speaking of it as seen at its best—as the perfection of human wisdom. The Western civilization, although belonging, as regards its earliest beginnings, to a period far ante-dating history, and now exhibiting, in respect of its economic features, a sudden and amazing rapidity of forward movement, gives many tokens of having, even yet, covered but a comparatively small part of the course which it is destined to run ; and a conspicuous feature among its contrasts with the Eastern civilization is the dissatisfaction, unrest, and vague aspiration for a better industrial and social system that pervades it.

2. Relation to recognized order and system. The

explanation of the last-named among the above points of contrast, is found in the fact that whereas the system mentioned is, in the East, the result of the successful carrying-out by the Government of a matured and thoroughly-systematic Philosophy of Human Existence, that of the West has thus far been the product simply of the psychological laws of a humanity actuated mainly by motives belonging to the lowest order of selfishness, and guided by a blind and groping empiricism.

3. Form of industrial organization. Two highly-contrasted systems of wealth-generation have prevailed, the one paramount in Eastern, the other in Western, industrial life. In the East, the method favored by the Government and admirably developed, to the utmost possible discouragement of the other, is that of Individualistic in contradistinction from the second method, the Capitalistic, form of industrial organization. In the former,—repudiating the barbarian conception of ease (sloth) as the highest good—the fundamental idea is that labor—manual labor, directed by high intelligence,—is capable of being made the basis of all the satisfaction derivable from Comfort and Character ; the concurrent influences being those of the Home as the Workshop, the Soil as the chief material operated on, and Good Manners as the means of carrying into all intercourse other than domestic, the kindness and spirit of mutual concession and accomodation which makes the home a school of cheerful and ready altruism. In the latter, the fundamental concept—if it may be said to imply any co-ordinating idea whatever—is of wealth as the sum and epitome of all things desirable, and of labor as an evil whose only mitigating quality

is that of its agency in securing wealth. In it the most conspicuous feature is the absence of system, due to the lack of any settled Philosophy of Human Existence among the intellectual leaders of Western civilization. It would require more space than we can spare, however, to set forth properly the various points of divergence to be noted between this accidental confusion of contending theories and blindly-empirical practice, and the truly admirable adjustments of the real to the ideal exhibited in the best examples of rural Chinese industrial and social life.* But we must find time for the mention, at least, of that feature which, to the Chinese apprehension, constitutes so potent a factor in both Comfort and Character, to wit., Good Manners. In this particular, our Western civilization displays all the variety naturally to be anticipated in view of the variety in local influences, especially those of tradition; but, speaking broadly, a comparison with the Eastern would be greatly to its disadvantage. That Western nation which we have seen bearing so conspicuous and significant a part in the development of the Capitalistic system, naturally retains as yet in its manners as in its foreign policy, somewhat of the arrogant assumption inseparable from the rapacity which enabled it to contribute so largely to that development; and the infec-

* The reader must not mistake our commendation of certain features of the Chinese civilization, however pronounced, for the expression of a favorable opinion of that organization, as a whole. Were it a part of our plan to enter upon an exhaustive study of the latter, our conclusions would be decidedly to the contrary. All that concerns us in the present instance, however, is not the ensemble, the totality, but simply such elements thereof as are profitable for instruction pertinent to the inquiry in hand.

tion of this repellent assertion of superiority, spreading into other societies employing the same language, constitutes a serious drawback to progress where its prospects are in other respects the most promising. But the civilization which has already produced among the most influential classes of this people a courtesy so winning and delightful, as exhibited toward those whom they recognize as properly-accredited strangers, must surely remove in time this incongruous survival of a ruder past :—especially under the elevating and refining influences of the Systematic Era.

A word now as to the dangers to the permanence of each system respectively, which now press upon the attention of the thoughtful statesman, whether of the East or the West. In the case of the former, we readily perceive that the impending evils are due to imperfection in the system itself. Whatever the excellences of the social structure which has for so long done honor to the philosophical system of which it is the product, the fact is now forced on the attention of its most devoted adherents that it has defects which must be remedied if they are not to prove fatal. A nation absorbed in unqualified admiration of the past, and hence viewing every new suggestion as an evil, can never develop the command over nature which enables the progressive nations to hold it at their mercy ; and the alternative, “Change or succumb” must shortly be accepted and acted on. In the West, it is no inherent vice in its philosophical system that makes the menace, but, as we have had such frequent occasion to recognize, the lack of any such system :—unless the philosophy of human helplessness can be called a system of action.

The lesson of all this is, that the situation of neither civilization is incurable: that each, after its fashion, may be set in the way of doing its proper part as an advancing column in the march of human progress:—the Eastern, by adopting—if the genius and character of the Chinese nation is competent for the change—the requisite features of the Western civilization: the Western, by attaining and applying the systematic knowledge which human experience seems now to place within its grasp, thus making easy the reforms which shall include the introduction of the desirable features of the Eastern.

A volume much larger than the present one would scarce suffice for the proper treatment of this subject, but the further extension of its discussion would be out of place here; and in any event, whatever of space remains available for this division of our inquiries, must be devoted to a brief reversion to those weightier suggestions which, if no undetected error or oversight mars the train of reasoning by which they have been reached, possess a stronger claim on the attention of the pioneers of thought than those which pertain to the narrower sphere of practical problems.

In our efforts to discover the underlying principle of human progress, we have, in attaining the desired result, arrived at the same time at knowledge of much broader scope and deeper import. Simultaneously with the discovery of the true relation of the Evolution of Wants to the progressional movement,—being indeed, a necessary implication of that discovery—flashes upon us the conception of Man's Place in the Universe. Once that we have grasped this latter conception, we find ourselves able to detach ourselves from our own

insignificant position as part of the scheme, and to assume one of independent observation, whence to command a view of the whole range of the movements—past, present, and future—whereby the Divine purpose of the development of Humanity into fitness for intimate association with Deity has been, is, and is to be realized. And again, no sooner is this new conception grasped, than there stands revealed to our consciousness the core and essence of the Philosophy of Human Knowledge. We perceive that the contradictions and complexities that have hitherto mocked at human ingenuity and baffled conjecture in the treatment of this subject, range themselves in order and system about the co-ordinating concept of the selection of a special field of action within whose limits, and not beyond them, the drama of human evolution is to be enacted. In the light of this concept it is plainly to be seen that the line between the knowable and the unknowable, hitherto sought in vain, is to be drawn, not between the realm of the phenomena cognizable to man and the realm of objective realities, but between that knowledge which is helpful to man for the satisfaction of his wants and that knowledge which is not. With our outlook upon the universe thus systematized, it requires no insight supernal to recognize, on the one hand, the futility of humanity's endeavor to see things for which it has no eyes, to hear things for which it has no ears, to understand that which passeth all human understanding; and, on the other hand, the inconceivability of the limitations of man's ultimate knowledge of his material environment useful for the development of his command over nature as an instrumentality for the satisfaction of his material needs,

and of his ultimate knowledge of his spiritual environment, as drawn from that spiritual communion to which his knowledge of the scheme of his evolution invites him.

Observe now the significance of the consequences involved in this dismissal of the element of The Unknowable from the theory of the Divine scheme of the Cosmos of Humanity—the universe knowable to Man. It sounds the hour of man's coming of age. Thenceforth he is the intelligent, active, sympathetic, co-operator with Cosmic Law and the Divine Intelligence behind it, in the plan of working out the exalted destiny of his race. What limits shall we assign to the march of human progress under the inspiration of such an ensemble?

Finally, is it permitted us to hope that these crude suggestions may be found worthy to be taken up by competent hands, with the ultimate result that—what with the confirmation of what is sound, and the correction of what is not—they may serve in some measure to indicate the way to the knowledge to which they aspire? The age seems so ripe for the dawn of the Systematic Era that no earnest seeker for the light should neglect any possible source of inspiration to the first step to a revelation, in contemplation of which no true enthusiast of Humanity but must feel

—“like some searcher of the skies,
When a new planet swims within his ken,
Or like stout Cortez when with eagle eyes
He stared at the Pacific, and all his men
Looked at each other with a wild surmise,
Silent upon a peak of Darien.”

SECOND DEPARTMENT.

PRACTICE.

Our theoretical work ended, it remains to make practical application of the conclusions at which we have arrived :—to formulate in business-like terms our answer to the question, What can a nation do to promote Human Progress? Fortunately, the undertaking here is much less formidable than that which has just been concluded. In the first place, we have no opposing system with which to contend, no erudite misinformation to be disestablished before we can gain a hearing. The classic Political Economy, denouncing as futile when not positively mischievous, every attempt to legislate in furtherance of individual effort to satisfy wants, the field is left clear for such action as our theories may prescribe. Then again, our theoretical system, disengaged of the classic metaphysics, assumes such a straight-forward and business-like simplicity that it affords no pretext for halting between two courses on any question.

With a view to covering the whole ground in the fewest words, we will adopt the following device :—Let us, in violation of the probabilities, suppose that one feature of the programme inculcated has been fully carried out, while all the rest have been allowed to

remain in abeyance. Let us assume that, in a certain nation having a popular Government, all parties* have united in carrying out, with a zeal equal to that of preparing resistance to the invasion of a formidable foe, a thorough system of education in the neo-empirical Concrete Science of Progress. Yet again, let us say that, as the result of a recent election, the masses have sent to the legislative body a sweeping majority of representatives devoted to their interests. We sit in the gallery of the Lower House, spectators of the scene at the moment when the leader of the popular party takes the floor to announce to the assemblage and the nation the legislative programme which his party proposes to carry out. Thus the stage is set for our little drama, and the prologue delivered.

The introductory formalities over, this Tribune of the People continues as follows :

“The majority for whom I at this moment speak, having been elected by the votes of a special class, and under pledges to carry out the principles to which it is attached, it is but natural that there should prevail in the minds of the minority here and of the part of the nation which you represent, a lively curiosity, not unmingled with apprehension, as to the nature of the legislation which is to be looked for under the circumstances. I regard it, therefore, as my first duty to establish, so far as lies in my power, a clear understanding among us all by satisfying that curiosity :

*The labor-class because of the assurance of predominance in the councils of the nation which intelligence superadded to their overpowering numbers must give them : the rest of the community in view of the dangers attendant on the acquisition of power by an ignorant majority.

confident as I am that in doing this I shall at the same time remove that apprehension.

"Let me explain at the outset that we do not ask your confidence that your interests will be safe in our hands because we have become less selfish than formerly, but because we are now more intelligent. According to the system in which we have been instructed, and which we accept as our guide, an enlightened self-interest is the safest prompter in action, whether for an individual or a class :—safest for the individual, the class, and the nation at large. What I have now to prove to you, therefore, is the extent of our enlightenment, and I know of no better way of going about this than to give you a plain statement of our plans and purposes as follows :

"In the first place, you must realize the vital change in our point of view involved in the fact that whereas, under the old doctrines preached to us by your accepted leaders of thought, there was no possibility of a better future for us under the existing industrial institutions, we are now convinced that our unsatisfactory condition is traceable to a lack of intelligence in the regulation of the working of those institutions, and that national legislation, controlled by ourselves in accordance with the systematic knowledge now in our possession, is competent to relieve us from the evil consequences of the unsystematic statesmanship of the past. You must surely be able to see how everything that then impelled us toward breaches of the peace and desperate remedies, now makes for the conservatism which naturally belongs to the class that must suffer the most from disturbances to peaceful industry : how, under the influence of a confident

belief that it lies with ourselves to remove the evils that beset us, our eyes are opened as they could not be before, to the real character of the means of relief to which we either resorted or contemplated an ultimate resort. We now discern with clearer, saner, vision, all that was involved in the offences against order in strike-riots ; in the denial to the needy fellow-working man of the right to accept the employment offered him ; or in the change from the individual worker's freedom of choice among different opportunities of employment, to the slavery involved in State regulation of the place, the manner, and the compensation of his work. On this latter subject, you must pardon me if I draw upon your patience while I explain to you, from the point of view of intelligent Labor, an objection to the Scheme of State capitalistic production which but rarely figures in the discussions of Socialism, but which, to us, overshadows every other consideration.

"There is a picture, familiar to us all, probably, in one or another of its numerous reproductions, which represents a number of Silesian hand-loom weavers in the act of submitting the product of the season's labor to the inspection of the cloth-merchants' agents. The hard faces of the inspectors as they scrutinize the workmanship, the worn, anxious, expression of the weavers, the agonized suspense of their wives, combine to make it one of the most saddening scenes that the painter has ever drawn from real life. It enforces a truth that a working man alone can fully realize ; namely, that working for other people involves two separate things :—there is the doing of good work, which depends upon the workman ; and there is the

appraisement of its goodness, which depends on some one else. How much this truth signifies to the wage-worker, only those can tell who have been subjected to the caprices of a foreman who has his favorites that can do nothing wrong, his objects of persecution who can do nothing right. Under the existing system, this otherwise difficult and complicated problem finds a partial solution in the fact that there is an active demand for those foremen, managers, etc., who attract the élite of the skilled workmen in each branch of industry by the fairness and intelligence which mark their dealings with their men. Thus it comes about that there exists a strong correcting influence, based upon the freedom of action on the part of the better class of workmen, who, under ordinary circumstances, can compel good treatment because, if they do not receive it where they are, they can obtain it elsewhere.

"But the two essential points for us, enforced by all past and present experience of the wages-system, are these: first, that this face-to-face, man-to-man, transaction respecting the work performed by the first party and passed upon by the second, is inseparable from the system; and, second, that where there is friction in this relation, the foreman has in his power the means of keeping up such a constant irritation on the part of his victim that the latter's life could be made utterly wretched, but for his liberty to seek other employment.

"Now, fancy the employee's condition when 'the State' becomes his employer. It is the State in theory: it is, for him, in practice, the man who represents the second party in the transaction which determines the estimate put upon the employee's work. This man

will hold that place because he has shown the ability to manage his men in a way to make sure of their votes for the perpetuation of the political ascendancy of the party that gives him the place; and the chief end and aim of his daily activity will be the maintainance of that reputation. In other words, he will necessarily be the creature of a Ring. Do you ask why this is inevitable? We affirm it because the facts of experience prove it to be such. If the municipal Rings have been able to accomplish what they have done—I care not if they were all swept away to-morrow—upon the comparatively slender resources that lay within their reach, what could ever unseat a combination managed on the same lines, and with the advantage of their experience—the trained gangs already existing wherever there has been local public money to handle—into whose custody would pass all the capital of the country, on whom would be conferred the legal position of the employer of all the labor, and with whom alone would rest the making of all the contracts? Under such a condition of things, is there the remotest possibility that anything else should happen? And with the Ring once organized, what would there be left for the whilom self-respecting working-man whose pride it had been to be excelled by none in what he gave for what he got, but to adopt the methods of those about him, whom he saw favored in every way, while he was the constant object of oppression and abuse, that embittered every hour of his waking existence, in the shop or out of it?

“This is no new thing with us. The question of the inevitable relations between the workman and the inspector of his work was fully discussed in the famous

controversy between the late Charles Bradlaugh and Mr. Hyndman ; the upshot being the admission by the latter that Scientific Socialism did not undertake to lay down in detail all the adjustments required for its practical application to real life ; such things being better left to a natural process of development through experience. The Socialistic programme in this case, therefore, is this :—‘ The solution of the problem of the control of the quality of the work done, so as to secure faithfulness in its execution without involving tyranny in the controlling agent, which is now reached by a simple system of natural self-regulation, is to be achieved in some other way, arrived at by a process of natural selection out of the number that will be tried, not one of which we are able to conceive of as feasible.’

“ Now, however strongly some of us, while still so far under the influence of your former economic science as to despair of better things under the existing capitalistic system, may have felt inclined to lend a complaisant ear to Socialistic arguments, do you suppose that we have not sufficient intelligence to regard it as simple madness to embark in such an experiment before exhausting the possibilities of the safe and simple programme which I am now to lay before you ?

“ Before proceeding to this, however, one word more on the subject of our conservatism :—of the spirit which dominates all our projects in the direction of novelty, of experiment. It is not our province to pass our lives sitting in judgment over the pleas of contending theories, or wrapt in speculation over what might happen under imaginary conditions. Ours is a life of that kind of action in which the progressive

movement should regard safety before speed: each forward step being short enough to allow one foot to remain well poised on solid ground while the other performs the onward movement. In illustration of our feeling in this matter, take the case of the propagandism of our doctrines among the labor-class in other countries. We understand the wisdom of making progress by the gradual modification of existing institutions rather than by sudden and fundamental substitutions: we appreciate the difficulties and the dangers that attend the cutting-loose of a people from their past. Our entire scheme, of course, is founded upon the principle of Government by Public Opinion; but in a country whose form is monarchical, if the monarch and the nobles, in good faith and good humor, accept the inevitable, and fulfil acceptably their function as exemplars of moderation in display, purity of life, elevation in sentiment, refinement in taste, and courtesy of manner, we see no reason why the rest of the nation should become impatient of their existence. When we regard the question of what substitute could be found to supply what they do under these conditions, we should counsel a patient trial before adverse action.

"Our influence in this case will be of a piece with our own practice as regards the wealthy of our own community. We recognize the justification of their existence in the fact that, without them, there would be no capitalistic production:—that one might as well undertake to conduct a dairy-farm without cows. We cheerfully and with all good will accord to them the right to the possession of wealth, so long as they in turn recognize the conditions upon which they hold their title to it, namely, that they employ it in a

way—whether as consumers or investors—consistent with a right conception of the obligations of the individual to the nation;—to the Mutual Aid Association to which he owes the opportunity of accumulating his wealth. They may devote it to works of public utility, may spend it in the gratification of wholesome tastes, or employ it as capital, either directly, by themselves embarking in productive enterprise, or by loaning it to others for that purpose; or by consigning it to the care of institutions organized for making loans. To illustrate the manner in which we propose to draw the line, we see nothing objectionable, for example, in their expenditures in foreign travel, if these bear fruit in expanding their ideas and elevating their aspirations and their tastes; but we shall insist upon the principle that the absentee proprietor, permanently diverting from its fructifying function within the Association the wealth which that Association confers on him, is not spending his own money, but other people's: he does not fulfil the conditions which create his title to it: he ignores the fact that it is accorded to him because that disposition of it best harmonizes with the interests of the Association. Even here, manifest as are the equities in the matter,—as in many other cases analogous thereto as regards difficulties in the practical application of principles wholly unobjectionable in themselves—we shall endeavor to work through public opinion rather than through legal coercion.

“At this point, permit me to interrupt for a moment the thread of the discussion, to call your attention to one feature of superiority in the system of government by the masses. It relates to this matter of public opinion. I need dwell upon it at no greater length,

however, than to remind you what an advantage lies in the hands of those who possess the confidence of this great body, as regards inspiring them with an idea, and what power inheres in an idea that is put forward with such backing: how rare is the phenomenon of successful resistance against the pressure of the 'broad shoulders of the hurricane' of public disapproval. We propose to employ this instrumentality with a due sense of our responsibility in letting loose so formidable a force, and a proper appreciation of its value as a substitute for regulation by law.

"Resuming now the subject of our attitude toward the possessors of wealth, I would explain that we have learned to discriminate between the acquisition of wealth from Man and its acquisition from Nature. We recognize the fact that many of the largest fortunes are derived, not from productive industry, but by securing wealth already in the possession of other men. We perceive that this may occur in ways that are not at all objectionable, but the contrary; inasmuch as it is quite conceivable that a thing may possess a value to one that it does not possess to another, and hence a transfer may be advantageous to both buyer and seller: but we also perceive that there are cases—especially in those of large and rapid accumulation—in which the gain is founded rather upon an adroit system of false pretences than on anything else. As regards this latter form of acquisition, we shall first try whether public opinion can not be employed to make the odium attached to the method of obtaining the wealth outweigh the satisfactions attending its possession: thus removing the temptation to employ it. The most eager sportsman feels no disposition to put into his

game-bag a certain animal, said to be toothsome enough, but carrying with it an odor that would disperse any assemblage into which the successful gunner should bear the spoils of his chase. We shall aim to make a practical application of this suggestion to certain familiar methods of the Stock Exchange, in the management of corporations, etc.

Speaking of Corporations, we have learned here also to discriminate with more intelligence than in the days when the very word was an abomination in our ears. The comparatively-recent development of so-called Trusts and Combinations we regard as presenting complex features of good and evil; the problems arising in consequence being as yet too new to be dealt with hastily. But we shall take careful note of their fruits as they ripen, confident that these institutions can, with experience, be either disinfected or destroyed by means easily within our control. As regards the simple and familiar joint-stock, limited-liability, corporation, we now understand what an ideally-perfect instrumentality for enabling the working-man to develop into the capitalist, it is capable of being made. We recognize in this form of industrial enterprize, in which the bulk of its skilled employees are stockholders, a combination of the good features of the co-operative and the profit-sharing systems with those of the individual-capitalistic form, without the defects inseparable from each of these. It avoids the evil of interference in the management on the part of those not fitted for the work, which renders the failure of each co-operative manufacturing enterprise a simple question of time; it secures, under normal circumstances, something much more satisfactory than the meagre returns

to Labor in the profit-sharing business-organizations, while escaping the fundamental and fatal inconsistency of its non-loss-sharing feature ; and it does away with that obstacle to the rise of Labor, the difficulty of admission into the private firm. We can be relied upon for whatever of aid or encouragement it may lie within our province as legislators to give to the further extension of this, in our view, excellent institution.

“ There is a form of wealth-acquisition which does not properly belong to either of the classes I have mentioned, and to which, therefore, I must devote a few words separately. I refer here to the much-discussed ‘unearned increment,’ namely, wealth such as that created by the enhancement of values in real estate resulting from the growth of population. This form, however, we readily dispose of by conceding the right of possession as established law and custom have assigned it :—doing this upon the ground that all of us take advantage of precisely the same principle ; each individual claiming, in his own case, the whole of the earnings of his capital or his labor, although in point of fact not one of us can claim more than a comparatively-insignificant share in the creation of the conditions which made possible our command of that capital or of the opportunity for that labor :—not to speak of the development of the faculties that gave that labor its value :—and this rightfully, because it is the adjustment most in harmony with the public welfare.

“ I have already alluded to the fact that, in capitalistic production, the wealth created is won, not from man, but from Nature. You can imagine that this was by no means a welcome revelation to us when it

was further explained that this winning was due, not to Labor, but to Capital :—to us who had grounded our claims for a larger share in the wealth produced, on the supposed fact, taught us by your teachers, that all wealth was the creation of Labor. But a more complete and systematic comprehension of the entire scheme of nature in the generation of wealth has reconciled us to an explanation of the facts which really places our claims on a much more substantial and business-like foundation. We have learned that, under the Capitalistic system, not a dollar—not only of the profits of Capital, but also of the entire body of wealth produced—comes out of the pockets of Labor : that, on the contrary, every dollar even of the wages of Labor, is taken out of new wealth, the creation of which is due to the initiative of Capital : that the capitalist, moved thereto by the prospect of profit, assembles out of the stores of Nature the requisites of production, in the shape of natural objects and forces, among which is human labor, and provides the conditions necessary to that interaction among these agencies which results in the wealth-creation : that, in point of fact, the human labor employed is simply one among the various commodities purchased by the capitalist in the prosecution of his enterprise. The relations, then, of Labor to the scheme of which this is a part, may be defined thus :

“ In the first place, there is what may be called its passive share, as being contributory, out of its mass, to the requisite movements, by the supply of human faculties which it furnishes, just as the coal-formation which yields the required fuel, is passively contributory. In the second place, it is a source of Demand, the

indispensable prerequisite of all wealth-production. In these two aspects it plays the part of a means to a certain end, to wit., the bringing into existence of new wealth won from nature. In the third instance, on the contrary, Labor figures as an end, the existence of which alone gives significance or value to the entire wealth-generating programme. In combination with Capital—assuming, for the moment, that between them they represent the whole body of humanity constituting the nation—the provision for the satisfaction of the wants of the two is the reason for the existence of wealth, and, consequently, of the scheme for its creation. Labor's claim, then, for better remuneration, rests not upon any comparison of its services in production with those of Capital,—for in its quality as a commodity it brings the market price—but upon the element of Humanity which distinguishes it from all the other agencies or instrumentalities employed. We claim a better remuneration for our contribution, not because we are contributors, but because we are MEN. The contribution is what gives validity to the claim, but, with this condition fulfilled, each worker has earned the position of a beneficiary in the scheme which is planned to provide the means for an elevated standard of existence for every deserving member of a truly-civilized community.

"Now, the means by which this apportionment of the wealth created is effected, is to be found in the transaction in which Capital bargains for the contribution made by Labor; and Capital is not to be regarded as a benevolent provider of wages. On the contrary, what insures the action of Capital in adventuring in productive enterprise, is, as we have seen,

the purely-selfish impulse derived from love of gain :—the only consideration which, while human nature is human nature, could induce the required action. Such being the case, the attitude of Capital in the negotiation with Labor will be as selfish as it is possible for it to be : it will pay what it must, and no more. In order, then, that the scheme of nature shall be carried out, Labor must be placed at such an advantage in this negotiation that it can compel an adjustment in accordance with the scheme which requires, first, that the labor-class shall have command of the means for satisfying a large variety of wants, so that, by virtue of its numbers, it shall be the great source of Demand, and, second, that it may maintain that standard of Comfort which it is the aim of the Natural Scheme of Progress that it should enjoy.

“From this point of view we can form a conception of that Scheme as it exists in the present stage of its development.

“We have learned how Capital is provided for, so that, given adequate Demand and adequate intelligence in investing, its profits will be secured under the natural working of existing institutions—especially under the law of private property—and the results which the scheme contemplates, to wit., first, the adequate impulse to productive enterprise and the supply of the means for engaging in it, and, second, the satisfaction of the wants of the capitalist-class, up to the intended standard, will take care of themselves ; while, at the same time, natural law will see to it that these profits are not inordinate :—will, on the contrary, not exceed a moderate commission on the wealth which Capital has brought into existence. But while Capital

is thus prevented from taking more than the share most advantageous to the interests of the Association at large, it is plain that there is not enough left to carry out the scheme in the case of Labor,—which is the same as saying that there is not, as things stand, wealth enough created 'to go round.'

"How explain this hitch in the working of the scheme, notwithstanding the Law of Cumulative Wealth-Generation, according to which Production makes Demand, and Demand makes Production? The disturbing influence is found in the extent to which Demand is permitted to expend its force outside of, instead of within, the circuit of connected movements, in which it would have inspired new Production, whose results would have energized new Demand, and so on continuously. This becomes plain enough when we work out the case of a community in which the production is all of the capitalistic sort, and, of a sudden, all of the demanding is transferred to industries outside of that community. We see that the arrest of all wealth-production in that community must be as sudden, as inevitable, as the stopping of a wind-mill when the breeze drops to a calm, or of a water-wheel when the water is shut off. Well, then, we propose to arrest this disengagement of Demand, this drain from the stream that turns *our* water-wheel.

"The new departure here from your old-time science is explained thus:—Its aim was to cheapen the objects of consumption to the individual consumer. Any effort for the enlargement of the consumer's purchasing-power was mere futile resistance against irresistible natural law. Our aim is to provide such opportunities of profitable employment for the great

mass of the population that it can buy liberally, as regards both the quantity and the variety of its purchases and the prices it pays. By thus creating an enormous consumer-class,—vast in numbers, each of whom, normally, enjoys a moderate competence, we create a community in which the economic ideal is not a reign of low prices as compared with the rest of the world, but, instead, a system of 'live and let live'—abundant employment for Capital and Labor in every branch of industry—agricultural, manufacturing, or what not—and the remuneration of each individual contributor to the wealth-generating activity based on the principle that each will secure a high price for his own services when each concedes a high price for the services of others. The town will enjoy a better country trade in proportion as its purchases confer a higher degree of prosperity on the country, and *vice versa*. This scheme of course involves the existence of a large volume of wealth in the nation. But the recent experience of the leading modern industrial countries proves that already, notwithstanding the lack of intelligence respecting the natural law of cumulative wealth generation, the growth of wealth is the leading economic phenomenon of the period. In fact, it leaves no room for rational doubt that when the reign of system is established and the normal influence of Demand on Production and of Production on Demand secured, there will be no lack of completeness in the working of this part of the scheme.

"This brings us to the subject of the regulation of the nation's Demand. The method, in an unsystematic shape, is old and familiar, and of proved efficiency. The foreign article is taxed sufficiently to

make the domestic equivalent cheaper to the individual consumer. There is also required—which is less familiar, but of course sure of producing the result intended—such restriction of the inflow of foreign labor as is necessary for giving the home population the contemplated opportunities of employment. The legislation in pursuance of the first of these objects is greatly simplified by the exposure of the fallacy that, in estimating the comparative cost of the foreign and the domestic product, respectively, the earnings of the home Capital and Labor are to be accounted as so much of expenditure on the part of the nation. Under the corrected method, according to which the cost of the product is determined by the extent to which the resources of the nation have been impaired by the act of production, the great bulk of the Demand of each advanced modern nation is directed upon articles whose cost will be incontestably less for the domestic than the imported article. Now, observe what an advantage this gives to us in the responsible position in which we are placed in this matter of regulating the foreign trade of the country. We can be conservative to the extreme of confining our action—aside from questions of revenue—to the trade in those articles in which the domestic article is actually the cheaper of the two. The legislation in this case is necessary because, although cheaper as regards the outlay of the nation at large—and it is the business of the nation alone that we are managing—the cost of the domestic article may be the greater to the individual consumer, because *he* must pay what the nation does not, namely, the wages of the Labor and the profits of the Capital, in the case of the domestic, the same as in the case of the foreign pro-

duct: that is to say, the individual purchaser must pay to others the cost of these, whereas the nation pays them to itself. But so long as we confine it to the articles whose importation would be a palpable loss to the nation as a Mutual Aid Association, we can count on having the approval of every member of the community worthy of membership therein.

"This programme must strike you as almost absurdly simple, amounting in effect to nothing more than a modification of familiar legislation respecting trade and immigration; yet, while this is all true, there is another aspect of the matter. By these simple proceedings we put on trial the essential features of all this new knowledge through which you have undertaken to so enlighten us in advance that the inevitable transfer to us of the control of the nation's legislation might be as little dangerous as possible. By means of it, we put to the test your theory that the institutions which have brought things to their present unsatisfactory condition, need only to be more intelligently employed to give us, the dissatisfied party, the relief demanded, and this with less delay and less risk than through any other cause that has been suggested. By this legislation we make a practical trial of the economic law of the cumulative generation of wealth, and if this is conclusively established, every industrial question will range itself in order and system, every social problem find a ready solution. That this will be the case through the mere operation of natural law, I hope to place beyond question by the facts which I propose presently to lay before you. Meantime one topic remains, to which the awakened intelligence of the

labor-class attaches so much weight that it must find at least a passing notice here.

"Up to this point, it has been my object to satisfy you that we have so clear a comprehension of, and so much confidence in, the teaching of the reformed science, that we shall give to the methodized capitalistic production a thorough trial of the extent to which it can remove the unsatisfactory status of Labor. I have now to mention a resource outside of the capitalistic system, which we propose to investigate. We have learned of the existence of another civilization, wherein the system of individualistic production—the system in which employer and employee are embodied in a single personality—as the main dependence of a vast population, had ceased to be an experiment before our civilization had birth. It would seem that under this system the art of winning wealth from nature by the cultivation of the soil has been carried to a perfection that makes our own efforts in that direction, so far as concerns the fortunes of the labor-class, seem the merest bungling. When we are told of a nation in which five acres of land are made to yield a handsome competence, two acres a sure immunity from poverty, we are resolved that such an object-lesson shall no longer be lost upon us, but that whatever is needed of national action to bring it within reach shall be taken. If our own labor-class is competent to acquire such skill, the opportunity shall not be wanting. You can well credit this when you reflect what a resource against the encroachments of Capital Labor will possess, if each working-man has his own little holding, from which he can draw a subsistence in times of strike, a healthful, pleasing, existence for young and

old of his family, in exchange for the home in the factory town :—all of which may readily be his, if Chinese skill in cultivation can be combined with cheap rapid transit. Out of these considerations we draw great encouragement that the changes advantageous to Labor which the systematic treatment of the Capitalistic system should yield, will be largely reinforced by engrafting upon that system the best features of the individual industry.

“A few words will suffice to explain our position on the question of government interference with the religious convictions of the individual citizen. While we have learned to regard the spiritual life as immeasurably the most important feature of human existence, we have also learned that the variations in individual conceptions of the essential and non-essential in religious faith are so great that government interference beyond the point of a thorough education in the Divine Scheme of Human Progress which Science discloses, would be more mischevious than beneficial.

“Resuming now the explanation of our views and purposes as affecting existing institutions, I propose to show you how, to our apprehension, we shall best discharge our duty to you and to the nation, by carrying out in practice that system of uncompromising but enlightened selfishness which you have taught us to regard as the true basis of national welfare and human progress.

“Let us inquire, then, whose interests are imperilled by this accession of the labor class to the control of the legislation of the nation.

“Not those of Capital. If by legislation Capital

should be oppressed to such a degree that the pressure exceeds that of the indisposition to remove investments beyond the reach of such wrong, all circulating capital, as fast as it could be withdrawn from its existing employments, would take the wings of a bird. Fixed capital would of course be more or less without this resource, but the heavier the exactions on it, the less the likelihood that new wealth would be deliberately dropped into the trap. In short, Labor and the nation at large would soon learn that, as a horse, if it is to do a horse's work, must have a horse's feed, so must Capital receive its due recompense if it is to be counted on as an unfailing factor in production. The labor-class, being intelligent, will therefore see no advantage to itself in infringing in any respect upon the rights of Capital.

"Not those of the Consuming-Class. The consumption of a country may be classified either (1) as that which is based upon the wages of Labor; or (2) that which is not. So far as concerns the first of these, neither we nor you are painfully apprehensive. You are fully persuaded that we will take proper care in the premises, and we—it need scarcely be said—share that confidence. As regards the consumption based on resources other than wages, it is conceded that we shall do all that lies in our power to exploit it to the advantage of Labor. How, then, can it be reached? This will depend upon the category to which the object of consumption reasoned of belongs. It may be an article produced abroad or one produced at home. If it is an article of importation, we shall endeavor to make it pay into the national treasury as large a sum as possible. Where, then, must we draw the line? We

must draw it at the point at which it will yield the most revenue:—in other words, where the cost of the article will not too greatly diminish its consumption. Under such conditions, the duty can not reach an inordinate figure; no more, in fact, than may justly be regarded as a reasonable tribute paid to the nation for the conditions supplied by it, whereby the consumer was put in the way of acquiring and retaining the wealth which enables him to indulge in that kind of consumption. If the object of consumption is a home product, our interest as non-consumers thereof will be to secure as much return to Labor as possible out of the producing of it. But it is plain that the same considerations which compel moderation in taxing the imported goods must operate as imperatively, as inevitably, in this case as in that.

“There yet remains the question of exactions of another kind. It is competent for the dominant party in legislation to so regulate the hours of labor, the admission of immigrant labor, etc., as to promote the interests of the producing, to the detriment of those of the consuming, class. What limit, then, does natural law impose upon such exactions? The answer is supplied when we ask the counter-question, Who constitute the consuming-class? It is plain that any oppression, any invasion of the rights of that class must weigh most heavily upon the oppressors themselves.

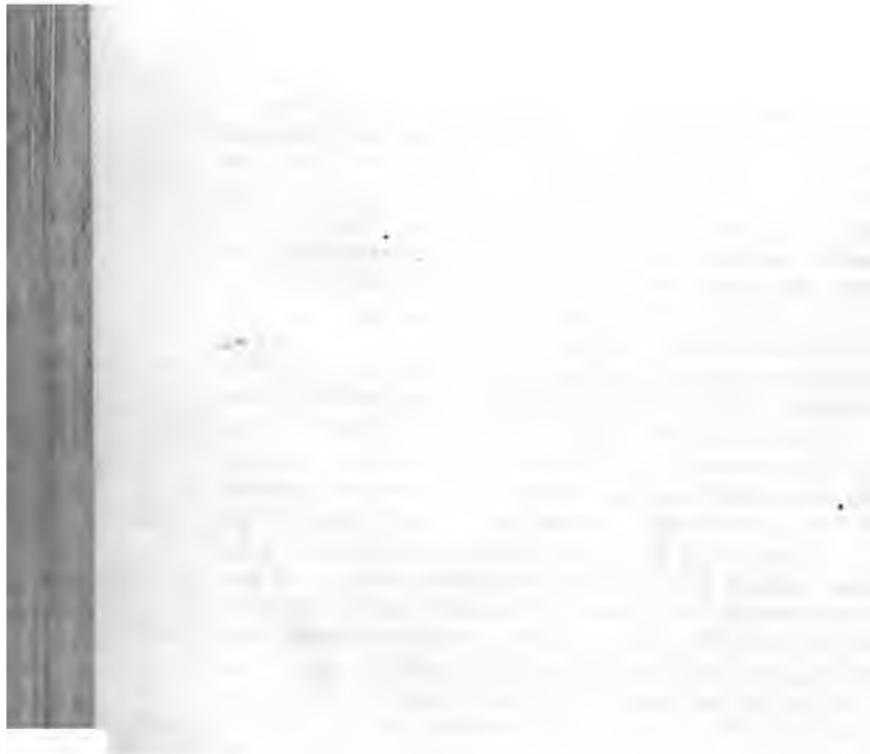
“Thus does natural law hedge round the political action of the labor-class in a way to produce the most admirable, most complete, system of spontaneous self-regulation. The class which—when once sufficiently enlightened to be able to pull together—must inevit-

ably, through its preponderance in numbers, control the legislation of every modern nation, is the one which must itself as inevitably feel more keenly than any other, the evil consequences of every mistaken measure. This marks it as the one which natural law has destined in the fullness of time to assume that responsibility. It is therefore with feelings of the fullest confidence that I announce to you our belief that the experience of this nation under the policy which will control our action will convince you and it that :

“A government of the labor-class, by the labor-class, for the labor-class, intelligently administered, is the best of governments for every class.”

SUPPLEMENTARY NOTE TO PAGE 177.

It has been suggested from a source entitled to the most respectful consideration, that sufficient emphasis has not been laid upon the fact that the tendency to the development of a higher order of wants will be inoperative where the effort to supply the existing wants so completely absorbs the time and energies as to leave no leisure or untaxed time for new influences to operate upon individual desires. But I conceive the difficulty to lie in my failure to indicate with sufficient clearness the sense in which I employ the term "satisfaction" of a want. As will be seen by reference to the remarks in the text with reference to the insatiate money-seeker (see page 177), the conditions under which,—according to the views intended to be set forth in this treatise—the more elevated need or aspiration is recognized as an inspiring motive, imply a satisfaction of a previous want which includes its removal from the attention:—the clamor of the old want is abated before the voice of the new one is heard at all; it is stilled before the new one receives a full hearing. In concrete human experience, the evolutionary change of wants, similarly with every other group of phenomena in the realm of the concrete, exhibits instances running through every conceivable variety of approximation to and of departure from an ideal completeness. The millionaire, with his household affairs thrifitly ordered, may be said to have extinguished his wants relating to the food, shelter, etc., of himself and those dependent on him, and the "satisfaction" of these wants leaves him, so far as they are concerned, wholly open to the reception of impulses imparted by wants of a different kind. The well-to-do mechanic, cultivator, dealer, clerk, or other member of what may be called the "comfortable class," while compelled to devote a large share of his working or business hours to employments having no other *raison d'être* than the provision for certain constantly-renewed needs, in so far as he is free from anxieties and irritating distractions and has command of leisure, is open to like impulses. And so with every variety of environment of circumstance, every shade of difference in individual propensity. There must be an opening for the new impulse; there must be a place for the need.



INDEX RAISONNÉ.

[The author, starting out to discover a Working Hypothesis which shall rightly answer the question, "What can Man do to further Man's progress?"—and perceiving that the methods of the Philosopher have proved inadequate, adopts experimentally the methods of the Business-Man. The results are so surprising that he is led on, step by step, from one point of view to another that comes in sight with each remove, until his original self-prescribed limitations of inquiry are far over-passed, and research is arrested only upon the solution of the ultimate problem in the series, to wit., the Nature and Limitations of Human Knowledge; each successive step being marked by the formulation of a new hypothesis, which would seem to systematize into one comprehensive generalization, all of the related phenomena of human experience. Thus,—taking the several results in an order the reverse of that of their discovery—we have, first, a Philosophy of Human Knowledge, the co-ordinating concept in which is set forth below under the caption "Knowledge"; second, a Cosmic Philosophy which expounds Man's place in Nature, and the implications thereof, to be found by reference to "Cosmos, Empirical Theory of"; third, a Theory of Human Progress, whose co-ordinating concept, the Want Hypothesis, and its consequences are to be studied in those parts of the Treatise indicated below under "Progress, Human, Theory of"; and, fourth, the object of the original undertaking, viz., a System of Business Economics which supplies prescripts of concrete action in the shape of clear, systematic, and feasible Working Hypotheses:—the proper references being given below under "Wealth, Theory of."]

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